CRYSTAL STRUCUTRE OF KETOPANTOATE HYDROXYMETHYLTRANSFERASE

Field of the Invention

The present invention relates to the enzyme ketopantoate hydroxymethyltransferase (KPHMT), and in particular its crystal structure and the use of this structure in drug discovery.

Background of the Invention

Pantothenic acid (vitamin B_5) is found in coenzyme A (CoA) and the acyl carrier protein (ACP), both of which are involved in fatty acid metabolism.

Pantothenic acid can be synthesised by plants and microorganisms but animals are apparently unable to make the vitamin, and require it in their diet. However, all organisms are able to convert pantothenic acid to its metabolically active form, coenzyme A.

The pathway for the synthesis of pantothenic acid is shown in Figure 1. It provides a potential target for the treatment of infectious disease, since inhibitors of the pathway should be damaging to bacteria and fungi but not to human or animal subjects infected by such microorganisms.

Of specific interest is ketopantoate hydroxymethyl-transferase (KPHMT (SEQ ID NOs: 7-11, for example); 5,10-methylenetetrahydrofolate: α-ketoisovalerate hydroxymethyl transferase, EC 2.1.2.11). Powers et al. (1) showed that KPHMT (SEQ ID NOs: 7-11, for example) is a class II aldolase that utilizes 5,10-CH_2-H_4folate (mTHF) to transfer a hydroxymethyl group to α-ketoisovalerate (α-KIVA) and thereby form ketopantoate, as shown in Figure 2. This is the first step in pantothenic acid biosynthesis. Inhibitors (whether competitive, non-competitive, uncompetitive or irreversible) of KPHMT (SEQ ID NOs: 7-11, for example) would be of significant technical and commercial interest.

KPHMT (SEQ ID NOs: 7-11, for example) from Escherichia coli has been cloned and over-expressed in E. coli., and was the

first sequence of a pantothenate enzyme to be determined (2). The recombinant protein has 264 amino acids, corresponding to a molecular weight of 28,237 Da. The oligomeric state of the enzyme appears to be organism specific. The homologue from the lower eukaryote, *Aspergillus nidulans*, has been expressed in an active form in *E. coli* and shown to be an octamer by gel filtration chromatography (3). However, the *E. coli* enzyme, was found to be a decamer by sedimentation equilibrium experiments, gel filtration chromatography and polyacrylamide gel electrophoresis under native conditions (1).

Very little is known about the mode of action of KPHMT (SEQ ID NOs: 7-11, for example), except that the addition of the hydroxymethyl group proceeds with retention of configuration (4). Mg^{2+} is essential for activity, whilst metal reconstitution experiments with Mn^{2+}, Co^{2+} and Zn^{2+} give enzyme with progressively less activity (1). To date, five ketopantoate auxotrophs, from *E. coli.*, *A. nidulans*, *Daturia innoxia* and two from *Salmonella typhymurium*, have been identified (5)(6). Four of these (from *E. coli*, *A. nidulans*, and the two from *Salmonella typhymurium*) have been shown to have defects in the *panB* gene which encodes KPHMT (SEQ ID NOs: 7-11, for example). The fifth (from the plant, *D. innoxia*) is suspected to have a *panB* defect (6). The *A. nidulans* auxotroph is caused by a deletion of Gly 168 (corresponding to Gly 205 in *E. coli*).

Until now no one has successfully determined the structure of KPHMT (SEQ ID NOs: 7-11, for example). This has prevented KPHMT (SEQ ID NOs: 7-11, for example) inhibitors being developed via structure-based drug design methodologies. Therefore, knowledge of the structure of KPHMT (SEQ ID NOs: 7-11, for example) would significantly assist the rational design of novel therapeutics based on KPHMT (SEQ ID NOs: 7-11, for example) inhibitors.

Definitions

In the following by "binding site" we mean a site (such as an atom, a functional group of an amino acid residue or a plurality of such atoms and/or groups) in a KPHMT (SEQ ID NOs: 7-11, for example) binding cavity which may bind to an agent compound such as a candidate inhibitor. Depending on the particular molecule in the cavity, sites may exhibit attractive or repulsive binding interactions, brought about by charge, steric considerations and the like.

By "fitting", is meant determining by automatic, or semi-automatic means, interactions between one or more atoms of an agent molecule and one or more atoms or binding sites of the KPHMT (SEQ ID NOs: 7-11, for example), and calculating the extent to which such interactions are stable. Various computer-based methods for fitting are described further herein.

By "root mean square deviation" we mean the square root of the arithmetic mean of the squares of the deviations from the mean.

By a "computer system" we mean the hardware means, software means and data storage means used to analyse atomic coordinate data. The minimum hardware means of the computer-based systems of the present invention comprises a central processing unit (CPU), input means, output means and data storage means. Desirably a monitor is provided to visualise structure data. The data storage means may be RAM or means for accessing computer readable media of the invention. Examples of such systems are microcomputer workstations available from Silicon Graphics Incorporated and Sun Microsystems running Unix based, Windows NT or IBM OS/2 operating systems.

By "computer readable media" we mean any media which can be read and accessed directly by a computer e.g. so that the media is suitable for use in the above-mentioned computer system. Such media include, but are not limited to: magnetic storage media such as floppy discs, hard disc storage medium and magnetic tape; optical storage media such as optical discs or

CD-ROM; electrical storage media such as RAM and ROM; and
hybrids of these categories such as magnetic/optical storage
media.

Summary of the Invention

The present invention is at least partly based on
overcoming several technical hurdles: we have (i) produced KPHMT
(SEQ ID NOs: 7-11, for example) crystals of suitable quality,
including crystals of selenium atom KPHMT (SEQ ID NOs: 7-11, for
example) derivatives, for performing X-ray diffraction analyses,
(ii) collected X-ray diffraction data from the crystals, (iii)
determined the three-dimensional structure of KPHMT (SEQ ID NOs:
7-11, for example), and (iv) identified binding sites on the
enzyme which are likely to be involved in the enzymatic
reaction.

In general aspects, the present invention is concerned with
identifying or obtaining agent compounds (especially inhibitors
of KPHMT (SEQ ID NOs: 7-11, for example)) for modulating KPHMT
(SEQ ID NOs: 7-11, for example) activity, and in preferred
embodiments identifying or obtaining actual agent
compounds/inhibitors. Crystal structure information presented
herein is useful in designing potential inhibitors and modelling
them or their potential interaction with the KPHMT (SEQ ID NOs:
7-11, for example) binding cavity. Potential inhibitors may be
brought into contact with KPHMT (SEQ ID NOs: 7-11, for example)
to test for ability to interact with the KPHMT (SEQ ID NOs: 7-
11, for example) binding cavity. Actual inhibitors may be
identified from among potential inhibitors synthesized following
design and model work performed *in silico*. An inhibitor
identified using the present invention may be formulated into a
composition, for instance a composition comprising a
pharmaceutically acceptable excipient, and may be used in the
manufacture of a medicament for use in a method of treatment.
These and other aspects and embodiments of the present invention
are discussed below.

In a first aspect, the present invention provides a crystal of KPHMT (SEQ ID NOs: 7-11, for example) having a monoclinic space group $P2_1$, and unit cell dimensions of a = 86.1 Å, b = 157.2 Å, c = 100.2 Å and β = 97.4°, or more generally a = 86.1±0.2 Å, b = 157.2±0.2 Å, c = 100.2±0.2 Å and β = 97.4±0.2°.

We have found that the asymmetric unit of such a crystal corresponds to a KPHMT (SEQ ID NOs: 7-11, for example) decamer which may be thought of as a pentamer of KPHMT (SEQ ID NOs: 7-11, for example) dimers, the dimers being related by a non-crystallographic five-fold axis

Alternatively, or additionally, the crystal may have the three dimensional atomic coordinates of Table 1. An advantageous feature of the structural data according to Table 1 are that they have a high resolution of about 1.8 Å.

The coordinates of Table 1 provide a measure of atomic location in Angstroms, to a first decimal place. The coordinates are a relative set of positions that define a shape in three dimensions, so it is possible that an entirely different set of coordinates having a different origin and/or axes could define a similar or identical shape. Furthermore, varying the relative atomic positions of the atoms of the structure so that the root mean square deviation of the residue backbone atoms (i.e. the nitrogen-carbon-carbon backbone atoms of the protein amino acid residues) is less than 1.5 Å (preferably less than 1.0 Å and more preferably less than 0.5 Å) when superimposed on the coordinates provided in Table 1 for the residue backbone atoms, will generally result in a structure which is substantially the same as the structure of Table 1 in terms of both its structural characteristics and potency for structure-based design of KPHMT (SEQ ID NOs: 7-11, for example) inhibitors. Likewise changing the number and/or positions of the water molecules and/or substrate molecules of Table 1 will not generally affect the potency of the structure for structure-based design of KPHMT (SEQ ID NOs: 7-11, for example) inhibitors. Thus for the purposes described herein as being aspects of the present

invention, it is within the scope of the invention if: the Table 1 coordinates are transposed to a different origin and/or axes; the relative atomic positions of the atoms of the structure are varied so that the root mean square deviation of residue backbone atoms is less than 1.5 Å (preferably less than 1.0 Å and more preferably less than 0.5 Å) when superimposed on the coordinates provided in Table 1 for the residue backbone atoms; and/or the number and/or positions of water molecules and/or substrate molecules is varied. Reference herein to the coordinate data of Table 1 thus includes the coordinate data in which one or more individual values of the Table are varied in this way.

Also, modifications in the KPHMT (SEQ ID NOs: 7-11, for example) crystal structure due to e.g. mutations, additions, substitutions, and/or deletions of amino acid residues (including the deletion of one or more KPHMT (SEQ ID NOs: 7-11, for example) protomers) could account for variations in the KPHMT (SEQ ID NOs: 7-11, for example) atomic coordinates. However, atomic coordinate data of KPHMT (SEQ ID NOs: 7-11, for example) modified so that a ligand that bound to one or more binding sites of KPHMT (SEQ ID NOs: 7-11, for example) would be expected to bind to the corresponding binding sites of the modified KPHMT (SEQ ID NOs: 7-11, for example) are, for the purposes described herein as being aspects of the present invention, also within the scope of the invention. Reference herein to the coordinates of Table 1 thus includes the coordinates modified in this way. Preferably, the modified coordinate data define at least one KPHMT (SEQ ID NOs: 7-11, for example) binding cavity.

In a further aspect, the invention provides a method for crystallizing a selenomethionine KPHMT (SEQ ID NOs: 7-11, for example) derivative which comprises producing KPHMT (SEQ ID NOs: 7-11, for example) by recombinant production in a bacterial host (e.g. *E. coli*) in the presence of selenomethionine, recovering a selenomethionine KPHMT (SEQ ID NOs: 7-11, for example)

derivative from the host and growing crystals from the recovered selenomethionine KPHMT (SEQ ID NOs: 7-11, for example) derivative.

Thus, the selenium atom KPHMT (SEQ ID NOs: 7-11, for example) derivative and KPHMT (SEQ ID NOs: 7-11, for example) produced by crystallising native KPHMT (SEQ ID NOs: 7-11, for example) (see the detailed description below) are provided as crystallised proteins suitable for X-ray diffraction analysis.

The crystals may be grown by any suitable method, e.g. the hanging drop method.

In another aspect, the invention provides a method of analysing a KPHMT (SEQ ID NOs: 7-11, for example)-ligand complex comprising the step of employing (i) X-ray crystallographic diffraction data from the KPHMT (SEQ ID NOs: 7-11, for example)-ligand complex and (ii) a three-dimensional structure of KPHMT (SEQ ID NOs: 7-11, for example) to generate a difference Fourier electron density map of the complex, the three-dimensional structure being defined by atomic coordinate data according to Table 1.

Therefore, KPHMT (SEQ ID NOs: 7-11, for example)-ligand complexes can be crystallised and analysed using X-ray diffraction methods, e.g. according to the approach described by Greer *et al.*, *J. of Medicinal Chemistry*, Vol. 37, (1994), 1035-1054, and difference Fourier electron density maps can be calculated based on X-ray diffraction patterns of soaked or co-crystallised KPHMT (SEQ ID NOs: 7-11, for example) and the solved structure of un-complexed KPHMT (SEQ ID NOs: 7-11, for example). These maps can then be used to determine whether and where a particular ligand binds to KPHMT (SEQ ID NOs: 7-11, for example) and/or changes the conformation of KPHMT (SEQ ID NOs: 7-11, for example).

Electron density maps can be calculated using programs such as those from the CCP4 computing package (Collaborative Computational Project 4. The CCP4 Suite: Programs for Protein Crystallography, *Acta Crystallographica*, D50, (1994), 760-763.).

For map visualisation and model building programs such as *O* (Jones et al., *Acta Crystallograhy*, A47, (1991), 110-119) can be used.

In another aspect, the present invention provides a method for identifying an agent compound (e.g. an inhibitor) which modulates KPHMT (SEQ ID NOs: 7-11, for example) activity, comprising the steps of:

(a) employing three-dimensional atomic coordinate data according to Table 1 to characterise at least a plurality of KPHMT (SEQ ID NOs: 7-11, for example) binding sites;

(b) providing the structure of a candidate agent compound;

(c) fitting the candidate agent compound to the binding sites; and

(d) selecting the candidate agent compound.

Preferably sufficient binding sites are characterised to define a KPHMT (SEQ ID NOs: 7-11, for example) binding cavity.

A plurality (for example two, three or four) of spaced KPHMT (SEQ ID NOs: 7-11, for example) binding sites may be characterised and a plurality of respective compounds designed or selected. The agent compound may then be formed by linking the respective compounds into a larger compound which maintains the relative positions and orientations of the respective compounds at the binding sites. The larger compound may be formed as a real molecule or by computer modelling.

In any event, the determination of the three-dimensional structure of KPHMT (SEQ ID NOs: 7-11, for example) provides a basis for the identification of new and specific ligands for KPHMT (SEQ ID NOs: 7-11, for example) e.g. by computer modelling.

More specifically, a potential modulator of KPHMT (SEQ ID NOs: 7-11, for example) activity can be examined through the use of computer modelling using a docking program such as GRAM, DOCK, or AUTODOCK (see Walters et al., *Drug Discovery Today*, Vol.3, No.4, (1998), 160-178, and Dunbrack et al., *Folding and Design*, 2, (1997), 27-42). This procedure can include computer

fitting of candidate inhibitors to KPHMT (SEQ ID NOs: 7-11, for example) to ascertain how well the shape and the chemical structure of the candidate inhibitor will bind to the enzyme.

Also computer-assisted, manual examination of the binding cavity structure of KPHMT (SEQ ID NOs: 7-11, for example) may be performed. The use of programs such as GRID (Goodford, *J. Med. Chem.*, 28, (1985), 849-857) - a program that determines probable interaction sites between molecules with various functional groups and the enzyme surface - may also be used to analyse the binding cavity to predict partial structures of inhibiting compounds.

Computer programs can be employed to estimate the attraction, repulsion, and steric hindrance of the two binding partners (e.g. the KPHMT (SEQ ID NOs: 7-11, for example) and a candidate inhibitor). Generally the tighter the fit, the fewer the steric hindrances, and the greater the attractive forces, the more potent the potential modulator since these properties are consistent with a tighter binding constant. Furthermore, the more specificity in the design of a potential drug, the more likely it is that the drug will not interact with other proteins as well. This will tend to minimise potential side-effects due to unwanted interactions with other proteins.

In one embodiment a plurality of candidate agent compounds are screened or interrogated for interaction with the binding sites. In one example, step (b) involves providing the structures of the candidate agent compounds, each of which is then fitted in step (c) to computationally screen a database of compounds (such as the Cambridge Structural Database) for interaction with the binding sites. In another example, a 3-D descriptor for the agent compound is derived, the descriptor including e.g. geometric and functional constraints derived from the architecture and chemical nature of the binding cavity. The descriptor may then be used to interrogate the compound database, the identified agent compound being the compound which

matches with the features of the descriptor. In effect, the descriptor is a type of virtual pharmacophore.

Having designed or selected possible binding partners, these can then be screened for activity. Consequently, the method preferably comprises the further steps of:

(e) obtaining or synthesising the candidate agent compound; and

(f) contacting the candidate agent compound with KPHMT (SEQ ID NOs: 7-11, for example) to determine the ability of the candidate agent compound to interact with KPHMT (SEQ ID NOs: 7-11, for example).

In step (e) the candidate agent compound may be contacted with KPHMT (SEQ ID NOs: 7-11, for example) in the presence of a substrate, and typically a buffer, to determine the ability of the candidate agent compound to inhibit KPHMT (SEQ ID NOs: 7-11, for example). The substrate may be e.g., one or both of $5,10$-CH_2-H_4folate, α-ketoisovalerate, or salts thereof. So, for example, an assay mixture for KPHMT (SEQ ID NOs: 7-11, for example) may be produced which comprises the candidate inhibitor, substrate and buffer.

Instead of, or in addition to, performing e.g. a chemical assay, the method may comprise the further steps of:

(e) obtaining or synthesising the candidate agent compound;

(f) forming a complex of KPHMT (SEQ ID NOs: 7-11, for example) and the candidate agent compound; and

(g) analysing (e.g. by the method of an earlier aspect of the invention) said complex by X-ray crystallography or NMR spectroscopy to determine the ability of the candidate agent compound to interact with KPHMT (SEQ ID NOs: 7-11, for example).

Detailed structural information can then be obtained about the binding of the agent compound to KPHMT (SEQ ID NOs: 7-11, for example), and in the light of this information adjustments can be made to the structure or functionality of the compound, e.g. to improve binding to the binding cavity. Steps (e) to (g) may be repeated and re-repeated as necessary. For X-ray

crystallographic analysis, the complex may be formed by crystal soaking or co-crystallisation.

In another aspect, the invention includes a compound which is identified as a modulator of KPHMT (SEQ ID NOs: 7-11, for example) activity by the method of the fourth aspect.

Following identification of an inhibitor compound, it may be manufactured and/or used in the preparation, i.e. manufacture or formulation, of a composition such as a medicament, pharmaceutical composition or drug. These may be administered to individuals.

Thus, the present invention extends in various aspects not only to an inhibitor as provided by the invention, but also a pharmaceutical composition, medicament, drug or other composition comprising such an inhibitor e.g. for treatment (which may include preventative treatment) of disease such as microbial infection; a method comprising administration of such a composition to a patient, e.g. for treatment of disease such as microbial infection; use of such an inhibitor in the manufacture of a composition for administration, e.g. for treatment of disease such as microbial infection; and a method of making a pharmaceutical composition comprising admixing such an inhibitor with a pharmaceutically acceptable excipient, vehicle or carrier, and optionally other ingredients.

In another aspect, the invention relates to a method of determining three dimensional structures of KPHMT (SEQ ID NOs: 7-11, for example) homologues of unknown structure by utilising the structural coordinates of Table 1.

For example, if X-ray crystallographic or NMR spectroscopic data is provided for a KPHMT (SEQ ID NOs: 7-11, for example) homologue of unknown structure, the structure of KPHMT (SEQ ID NOs: 7-11, for example) as defined by Table 1 may be used to interpret that data to provide a likely structure for the KPHMT (SEQ ID NOs: 7-11, for example) homologue by techniques which are well known in the art, e.g. phase modelling in the case of X-ray crystallography.

One embodiment of the method comprises the steps of:

(a) aligning a representation of an amino acid sequence of a KPHMT (SEQ ID NOs: 7-11, for example) homologue of unknown structure with the amino acid sequence of KPHMT (SEQ ID NOs: 7-11, for example) to match homologous regions of the amino acid sequences;

(b) modelling the structure of the matched homologous regions of the KPHMT (SEQ ID NOs: 7-11, for example) of unknown structure on the structure as defined by Table 1 of the corresponding regions of KPHMT (SEQ ID NOs: 7-11, for example); and

(c) determining a conformation (e.g. so that favourable interactions are formed within the KPHMT (SEQ ID NOs: 7-11, for example) of unknown structure and/or so that a low energy conformation is formed) for the KPHMT (SEQ ID NOs: 7-11, for example) of unknown structure which substantially preserves the structure of said matched homologous regions.

The term "homologous regions" describes amino acid residues in two sequences that are identical or have similar (e.g. aliphatic, aromatic, polar, negatively charged, or positively charged) side-chain chemical groups. Identical and similar residues in homologous regions are sometimes described as being respectively "invariant" and "conserved" by those skilled in the art.

Preferably one or all of steps (a) to (c) are performed by computer modelling.

Homology modelling is a technique that is well known to those skilled in the art (see e.g. Greer, *Science*, Vol. 228, (1985), 1055, and Blundell *et al.*, *Eur. J. Biochem*, Vol. 172, (1988), 513).

In general, comparison of amino acid sequences is accomplished by aligning the amino acid sequence of a polypeptide of a known structure with the amino acid sequence of the polypeptide of unknown structure. Amino acids in the sequences are then compared and groups of amino acids that are

homologous are grouped together. This method detects conserved regions of the polypeptides and accounts for amino acid insertions or deletions.

Homology between amino acid sequences can be determined using commercially available algorithms. The programs *BLAST*, *gapped BLAST*, *BLASTN* and *PSI-BLAST* (provided by the National Center for Biotechnology Information) are widely used in the art for this purpose, and can align homologous regions of two amino acid sequences.

Once the amino acid sequences of the polypeptides with known and unknown structures are aligned, the structures of the conserved amino acids in a computer representation of the polypeptide with known structure are transferred to the corresponding amino acids of the polypeptide whose structure is unknown. For example, a tyrosine in the amino acid sequence of known structure may be replaced by a phenylalanine, the corresponding homologous amino acid in the amino acid sequence of unknown structure.

The structures of amino acids located in non-conserved regions may be assigned manually by using standard peptide geometries or by molecular simulation techniques, such as molecular dynamics (7). The final step in the process is accomplished by refining the entire structure using molecular dynamics and/or energy minimization.

In another aspect, the present invention provides systems, particularly a computer systems, intended to generate structures and/or perform rational drug design for KPHMT (SEQ ID NOs: 7-11, for example), KPHMT (SEQ ID NOs: 7-11, for example)-ligand complexes or KPHMT (SEQ ID NOs: 7-11, for example) homologues, the systems containing either (a) atomic coordinate data according to Table 1, said data defining the three-dimensional structure of KPHMT (SEQ ID NOs: 7-11, for example), or (b) structure factor data for KPHMT (SEQ ID NOs: 7-11, for example), said structure factor data being derivable from the atomic coordinate data of Table 1.

In another aspect, the present invention provides computer readable media with either (a) atomic coordinate data according to Table 1 recorded thereon, said data defining the three-dimensional structure of KPHMT (SEQ ID NOs: 7-11, for example), or (b) structure factor data for KPHMT (SEQ ID NOs: 7-11, for example) recorded thereon, the structure factor data being derivable from the atomic coordinate data of Table 1.

By providing such computer readable media, the atomic coordinate data can be routinely accessed to model KPHMT (SEQ ID NOs: 7-11, for example). For example, RASMOL (Sayle *et al.*, *TIBS*, Vol. 20, (1995), 374) is a publicly available computer software package which allows access and analysis of atomic coordinate data for structure determination and/or rational drug design.

On the other hand, structure factor data, which are derivable from atomic coordinate data (see e.g. Blundell *et al.*, in *Protein Crystallography*, Academic Press, New York, London and San Francisco, (1976)), are particularly useful for calculating e.g. difference Fourier electron density maps.

Brief Description of the Drawings

Figure 1 shows the pathway for the synthesis of pantothenic acid;

Figure 2 shows the chemical reaction between α-KIVA and 5,10-CH_2-H_4folate which is catalysed by KPHMT (SEQ ID NOs: 7-11, for example);

Figures 3a and b show ribbon representations of the decameric structure as viewed respectively along and from the side of the non-crystallographic five-fold axis;

Figures 4a and b show ribbon representations of respectively top and side views of a protomer;

Figure 5 shows a sequence alignment between primary structure among five members of the KPHMT (SEQ ID NOs: 7-11, for example) family and the secondary structure of the *E. coli* enzyme (SEQ ID NOs: 7-12, respectively);

Figure 6 shows a stereo pair wire-frame electron density map of the substrate binding site with a ketopantoate product molecule (KPL) and a metal ion believed to be Mg^{2+} on which the enzyme is dependent for its activity;

Figure 7 shows an electrostatic potential map for a protomer viewed looking towards the opening mouth of the binding cavity;

Figure 8 shows a stereo pair ribbon representation of the KPHMT (SEQ ID NOs: 7-11, for example) binding cavity;

Figure 9 shows a schematic representation of the distorted octahedral binding site for Mg^{2+} in the KPHMT (SEQ ID NOs: 7-11, for example) binding cavity;

Figures 10 and b show respectively side and top view stereo pair ribbon representations of the mouth of the KPHMT (SEQ ID NOS: 7-11, FOR EXAMPLE) binding cavity; and

Figures 11a and b show stereo pair ribbon representations of respectively (a) the binding cavities of a KPHMT (SEQ ID NOs: 7-11, for example) dimer, and (b) the interface between adjacent KPHMT dimers.

Detailed Description of the Invention

The present invention is founded on the determination of the three dimensional atomic structure of KPHMT (SEQ ID NOs: 7-11, for example).

Solving the Crystal Structure

1. Preparation of Recombinant KPHMT (SEQ ID NOs: 7-11, for example) Protein

Cell Growth

3 x 15 mL starting culture of *E-coli* Hfr3000-YA139 cells with the plasmid pCEJ01 containing the clone pAL01 was incubated at 37 °C overnight in LB broth containing ampicillin (50 mg/mL). This was added to 3 litres of LB broth containing ampicillin (50 mg/mL) and IPTG (90 mg/mL) and incubated at 37 °C for 16 h. Selenomethionine (SeMet) protein was over-expressed in media

containing selenomethionine, as well as six other amino acids (lysine, phenylalanine, threonine, isoleucine, leucine and valine) whose presence inhibit methionine biosynthesis (8) and was purified in the same way as the wild type. The cells were harvested by centrifugation at 10,000 rpm at 4 °C for 30 min. The wet cell pellet weighed approximately 9 g.

Protein Extraction

The cell pellet was resuspended in 50 mL of 100 mM phosphate buffer (pH 7) containing 1 mM DTT, 1 mM ethylene-diaminetetraacetic acid (EDTA) and 1 mM phenylmethyl-sulphonylfluoride (PMSF). The suspension was sonicated on ice for 1 s bursts every 3 s for 12 min and the lysate centrifuged at 12,000 rpm for 30 min. Nucleic acids were removed from the supernatant by precipitation with 2% protamine sulphate (1 mL/g of cell pellet) and centrifugation at 12,000 rpm for 30 min.

The protein was precipitated from the supernatant with ammonium sulphate (25 - 60% saturation) and centrifugation at 12,000 rpm for 30 min. The protein pellet was dissolved in 30 mL of 100 mM phosphate buffer (pH 7) containing 1 mM DTT and 1 mM EDTA and dialysed, overnight against 25 mM phosphate buffer (pH 7) containing 1 mM DTT and 1 mM EDTA. The volume of the dialysed protein was reduced to below 20 mL by ultrafiltration.

Pellets that contained cell debris, 2% protamine sulphate precipitant and 0 - 25% ammonium sulphate precipitant were dissolved in a total volume of 30 mL of 100 mM phosphate buffer (pH 7) containing 1 mM DTT and 1 mM EDTA, pooled and dialysed, overnight, against 25 mM phosphate buffer (pH 7) containing 1 mM DTT and 1 mM EDTA. The volume of the dialysed mixture was reduced to below 20 mL by ultrafiltration and filtered through a 0.2 µm filter. The protein was purified by FPLC.

Hiprep Q XL anion exchange chromatography

The sample, in less than 10 mL, was loaded, using a 10 mL superloop, onto a Hiprep 16/10 Q XL column equilibrated in starting buffer which consisted of 90% buffer A, containing 50 mM potassium phospate buffer (pH 6.9), 1 mM DDT and 1 mM EDTA, and 10% buffer B containing 50 mM potassium phosphate buffer (pH 6.9), 1 mM DDT and 1 mM EDTA and 1 M potassium chloride (KCl). KPHMT (SEQ ID NOs: 7-11, for example) was eluted in a step gradient of 0.1 - 1 M KCl in 12 column volumes   (240 mL) and at a flow rate of 2.5 mL/min. The gradient was shaped as indicated below. KPHMT (SEQ ID NOs: 7-11, for example) eluted in a single peak at about 0.4 M KCl. Eluate fractions were assessed for KPHMT (SEQ ID NOs: 7-11, for example) content by SDS-PAGE. Fractions containing KPHMT (SEQ ID NOs: 7-11, for example) were pooled and dialysed overnight against starting buffer.

Source 15Q anion exchange chromatography

The sample, in less than 10 mL, was loaded, using a 10 mL superloop, onto a Source 15Q XV 16/10 column equilibrated in starting buffer which consisted of 90% buffer A, containing 25 mM potassium phospate buffer (pH 6.9), 1 mM DDT and 1 mM EDTA, and 10% buffer B containing   25 mM potassium phosphate buffer (pH 6.9), 1 mM DDT and 1 mM EDTA and 1 M KCl. KPHMT (SEQ ID NOs: 7-11, for example) was eluted of the Source 15Q XV 16/10 column in the same way it was eluted of the Hiprep 16/10   Q XL column. KPHMT (SEQ ID NOs: 7-11, for example) eluted in a single peak at about 0.4 M potassium chloride.

Eluate fractions were assessed for KPHMT (SEQ ID NOs: 7-11, for example) content by SDS-PAGE. Fractions containing KPHMT (SEQ ID NOs: 7-11, for example) were pooled and dialysed overnight against starting buffer.
KCl gradient used in anion exchange chromatography of KPHMT (SEQ ID NOs: 7-11, for example):

step 1 - 0.1 to 0.4 M KCl (0 - 50 mL)

step 2 - at 0.4 M KCl (50 - 110 mL)

step 3 - 0.4 to 0.5 M KCl (110 - 120 mL)

step 4 - at 0.5 M KCl (120 - 180 mL)

step 5 - 0.5 to 1 M KCl (180 - 190 mL)

step 6 - at 1 M KCl (190 - 240 mL)

Hiload 16/60 superdex 200 pg gel filtration chromatography

Sample was loaded in less than 10 mL onto a Hiload 16/60 superdex 200 pg equilibrated in buffer containing 50 mM potassium phosphate buffer (pH 6.9), 1 mM DDT and 1 mM EDTA. A constant flow rate of 0.5 mL per minute was maintained and 3 mL fractions were collected. Fractions containing KPHMT (SEQ ID NOs: 7-11, for example) were determined by SDS-PAGE, pooled and concentrated by ultrafiltration to greater than 5 mg/mL. 26 mg of protein was obtained from a 3 L cell culture.

2. Protein Crystallisation

The sample of KPHMT (SEQ ID NOs: 7-11, for example) was concentrated to 24 mg/ml in 40 mM of ketopantolactone (KPL; product) and 50 mM HEPES pH 7.4. Diffraction-quality single crystals of KPHMT (SEQ ID NOs: 7-11, for example) were obtained by the hanging-vapor diffusion method at 4 °C. To make a drop, one volume (1.5 µl) of protein solution was placed on a siliconised cover slide, and the equivalent reservoir solution was added at 19 °C. Reservoir solution contained 9% (w/v) PEG 8000, 50 mM NaCitrate (pH 6.8), 50-100 mM Na(CH$_3$CO$_2$) and 200 mM NaCl. The plate was sealed within 1 minute and left at 4 °C. After 2 hours the plate was placed into a polystyrene box, then the box was sealed and placed at 19 °C. Single crystals with dimensions of about 0.5 x 0.3 x 0.1 mm appeared within one or two days. These belonged to the monoclinic space group P2$_1$ with cell parameters a = 86.1 Å, b = 157.2 Å, c = 100.2 A and β = 97.4°, and accommodated one decameric enzyme per asymmetric unit, with a solvent content of 49%.

The SeMet KPHMT (SEQ ID NOs: 7-11, for example) crystals, which were prepared in a similar way to native KPHMT (SEQ ID NOs: 7-11, for example) crystals, seldom grew larger than 0.3 mm or thicker than about 30 μm. The SeMet KPHMT (SEQ ID NOs: 7-11, for example) stock solution contained 2 mM KPL and 10 mM DTT to protect the Se atoms from oxidation.

3. Data Collection

The structure of KPHMT (SEQ ID NOs: 7-11, for example) was solved by the MAD method (9) using the SeMet derivative. Data to 3.1 Å resolution were collected at 100 K, at three wavelengths on Station 19-ID of the Structural Biology Centre at the Advanced Photon Source of Argonne National Laboratory, Chicago, US. Crystals of KPHMT (SEQ ID NOs: 7-11, for example) were cryo-protected by a protocol of gradual soaking in the cryo-protectant PEG400. Each crystal was placed in 20 ml of crystallisation solution, and the concentration of PEG400 was gradually increased to 20% (v/v) in 5% increments. The soaking time at each PEG400 concentration was a minimum of 15 minutes. At each concentration step, KPL was added to a concentration of 2 mM. The flash-cooled crystals were used for data collection.

An X-ray fluorescence spectrum was recorded and used to select wavelengths for subsequent MAD data collection. Data were collected at the Se absorption edge λe = 0.97939 Å, the absorption peak λp = 0.97927 Å and at remote reference wavelength λr = 0.9393 Å. The diffraction data were indexed and integrated using the *D*TREK* suite (10), and reflexions were indexed and integrated using *MOSFLM* (11). The three data sets were scaled to the remote data-set using *SCALA* (12) and structure-factor amplitudes were calculated using *TRUNCATE* (13). Statistics of the processed data are listed in Table 2.

The native data set was collected to 1.8 Å resolution on Station 19-ID. A cryo-protectant solution for the native crystals contained 9% PEG8000, 50 mM NaCitrate (pH 6.8), 50-100 mM Na(CH3CO2), 200 mM NaCl, and 20% of PEG400.

4. Structure Determination and Refinement

160 out of the 180 Se sites in the asymmetric unit were found with the program *SnB* (14) using direct methods and anomalous difference data of λp SeMet. Data were phased with *SHARP* (15) using all three wavelength data sets, which also revealed two additional Se sites in the residual maps.

Data collected at the remote wavelength were treated as the reference data set and resolution limits of 40 to 2.3 Å were imposed. Experimental values of the anomalous dispersion (f' and f'' in Table 2) estimated from fluorescence spectra were used and refined during analysis. The resulting values are very similar to the theoretical values and are given in Table 2. Experimental phases were improved by solvent flattening using *SOLOMON* (CCP4, 1994), *via* the *SUSHI* graphical user interface (La Fortelle *et al.*, 1997) with a solvent content of 430%. The final electron-density map was easily interpretable and the whole polypeptide chain was assigned based on the initial electron density map.

The polypeptide chain was fitted in the MAD electron density map using program *O* (16). Rounds of maximum likelihood refinement with *REFMAC* (17) were alternated with visual inspection of electron density and manual rebuilding of side chains. Several rounds of simulated annealing with *CNS* (18) were included to refine the position of the main chain properly.

Table 1 provides the atomic coordinates of the final model.

The quality of the final model was assessed from Ramachandran plots and the analysis of the model geometry was carried out with the program *PROCHECK* (19). 10% of the reflections were set aside for R_{free} calculations. The plot indicated that 90.2% of the residues lay in the favourable regions and 9.8% in the allowed regions. The final R and R_{free} factors of the structure for all reflections between 75.0 and 1.8 Å resolutions were 0.229 and 0.263, respectively. The structural model for KPHMT (SEQ ID NOs: 7-11, for example)

consists of a decamer in the asymmetric unit with 2,640 amino residues, 19,830 protein atoms (non-hydrogen), 100 substrate atoms (non-hydrogen), 1,612 water molecules and 10 metal ions. The last cycle of the refinement without NCS-restrains gave a reasonable stereo-chemistry by using 229,076 unique reflections in the range of 75.0 to 1.8 Å resolution. The root mean-square deviation from standard values are 0.006 Å in bond distances (1-2 distance), 1.2° in angle distances (1-3 distance), and 22.1° in dihedral angles (planar 1-4 distance). From a Ramachandran plot the model was considered to exhibit a good stereo-chemistry.

Structural Characterisation

The crystal structure of KPHMT (SEQ ID NOs: 7-11, for example) is based on a decameric asymmetric unit formed by a pentamer of dimers related by a non-crystallographic five-fold axis. Figures 3a and b show ribbon representations of the decameric structure as viewed respectively along and from the side of the non-crystallographic five-fold axis.

The dimensions of the decamer are approximately 100 x 100 x 75 Å. The accessible area of the decamer, 83,200 $Å^2$, is small considering the surface area for each protomer (i.e. monomer subunit), 10,800 $Å^2$, while the buried surface of each protomer is 23%. The close packing of the protomers explains the protein's remarkable resistance to denaturation by heat and urea (20). The interface between protomers in each dimeric unit is large (1140 $Å^2$) and tightly organised, involving 88 (20 hydrophilic and 68 hydrophobic) interactions. However, the interface between protomers in the pentamer is smaller (760 $Å^2$) and involves only 20 (6 hydrophilic and 14 hydrophobic) interactions. For this reason, we believe that the dimer is the functional unit. This is corroborated by the homologue from *Aspergillus nidulans*, which is an octamer (3).

Each protomer is approximately spherical and has overall dimensions of 50 x 50 x 40 Å. Ribbon representation top and

side views of a protomer are presented in Figures 4c and d. The
tertiary structure is an $\alpha_8\beta_8$ (TIM (triose phosphate isomerase)
barrel with an extra α-helix located at the base of the β-barrel
(21). The barrel consists of eight parallel β-strands surrounded
by eight α-helices.

Sequence Alignment

35 proteins or translated gene-sequences have been
identified using a PSI-BLAST search, with high enough similarity
to be classified as members of the KPHMT (SEQ ID NOs: 7-11, for
example) family (22). The enzyme is found in bacteria, lower
eukaryotes (e.g. yeast) and in the plant *Arabidopsis thaliana*
but is not found in *Caenorhabditis elegans*, *Drosophila
melanogaster* or, as yet, in other higher eukaryotes. This is
consistent with the end product of this pathway being a vitamin.
We have analyzed the sequences from the 35 members of this
family to identify residues important to the mode of action.
Correlation between primary structure among five members of the
KPHMT (SEQ ID NOs: 7-11, for example) family and the secondary
structure of the *E. coli* enzyme is shown in Figure 5 (SEQ ID
NOs:7-12, respectively). The consensus sequence, generated by
ClustalW (23) with the sequences of the 35 members, highlights
that of the 264 residues, 23 residues are invariant while an
additional 77 are conserved. Six conserved sequence motifs, at
least six residues in length, were also identified. These are
^{42}LeuValGlyAspSerLeuGlyMet^{49} (SEQ ID NO:1),
^{111}ValLysIleGluGlyGly^{116} (SEQ ID NO:2), ^{135}GlyHisXGlyLeuThrProGln^{142}
(SEQ ID NO:3) (where X is a hydrophobic residue),
^{148}GlyGlyTyrLysValGlnGly^{154} (SEQ ID NO:4), ^{200}IleGlyIleGlyAlaGly^{205}
(SEQ ID NO:5) and ^{209}AspGlyAsnIleLeuVal^{214} (SEQ ID NO:6). The
first two of the six motifs contain residues shown in the
crystal structure to be involved in binding the ketopantoate
(and hence the substrate) or metal ion.

Deletion of residue Gly 168 (which corresponds to Gly 205
in the fifth motif given above) in *A. nidulans* has been shown to

prevent cell growth (3). This residue is invariant in 34 out of the 35 KPHMT (SEQ ID NOs: 7-11, for example) sequences and mutated to serine in a potentially inactive isoform from *Pseudomonas aeruginosa*. Thus, the motif may be required for correct folding of the protein.

Substrate Binding Site

The substrate binding site is located in a large cavity at the protein C-terminus ends of the β-strands. The cavity extends almost one quarter the distance in to the protein and is about 20 Å in length and about 10 Å x 15 Å in transverse section. The substrate is believed to bind before the cofactor, because the cofactor binds at the mouth of the cavity effectively blocking access to the cavity. Figure 6 is a stereo pair wire-frame electron density map of the substrate binding site showing a ketopantoate product molecule (KPL) and a metal ion believed to be Mg^{2+} on which the enzyme is dependent for its activity.

The electrostatic potential map for a protomer (shown in Figure 7) demonstrates that the opening mouth of the binding cavity is highly charged. The surface contains eight highly conserved residues that hydrogen bond to each other and the substrate or product. As shown in Figure 8, which is a stereo pair ribbon representation of the binding cavity, Asp 45 and Asp 84 hydrogen bond to Gln 142 and Lys 112, respectively, while Ser 46, Glu 181 and Lys 112 hydrogen bond to ketopantoate and the residues Tyr 25, His 136 and Asp 84.

The Mg^{2+} ion is bound in a distorted octahedral binding site of the binding cavity. Residues, Asp 45 and Asp 84 occupy axial and equatorial positions, respectively, while Glu 114 coordinates to Mg^{2+} through a water molecule that occupies an equatorial position. The keto and carboxyl groups of the product take up an axial and an equatorial position, respectively and the last equatorial position is occupied by a

water molecule. Figure 9 shows a schematic representation of the distorted octahedral binding site.

The coordination around Mg^{2+} is distorted due to hydrogen bonding between Glu 181 and the hydroxymethyl group of the product. We believe the geometry of the Mg^{2+} ion is less distorted, and hence lower in stabilization energy, when ketopantoate (product) is replaced by α-KIVA (substrate). This may be one mechanism by which the enzyme senses and releases the product.

Cofactor Binding Site

As yet, a $5,10-CH_2-H_4$folate cofactor binding motif has not been identified by X-ray crystallography. Nonetheless, we have developed an approach to find the cofactor binding site.

Initially we compared our structure to structures of tetrahydrofolate-dependent enzymes bound to folate analogues. The January, 2001 release of the Protein Data Bank (PDB) contains seven enzymes that bind tetrahydrofolate (THF). These are dihydrofolate reductase (DHFR), phosphoribosylglycinamide formyltransferase (PRGF), methylenetetrahydrofolate dehydrogenase (MTDH), glycinamide ribonucleotide transformylase (GRTF), thymidylate synthase (TS), serine hydroxymethyl transferase (SHMT), and methylenetetrahydrofolate reductase (MTR). A structural similarity search by the program *DALI* (24) shows that only four of the above proteins appear to be similar to KPHMT (SEQ ID NOs: 7-11, for example). These are MTR, DHFR, PRGF and SHMT, but for MTR, DHFR and PRGF, the distance of the folate cofactor binding site is too far from the substrate binding site relative to the corresponding distance in KPHMT (SEQ ID NOs: 7-11, for example).

This left SHMT, which appears to be functionally similar to KPHMT (SEQ ID NOs: 7-11, for example), although SHMT is a class I aldolase (KPHMT (SEQ ID NOs: 7-11, for example) is a class II aldolase) because pyridoxal phosphate is used in addition to the folate cofactor. Given the crystal structures of SHMT from *E.*

coli bound to the folate, 5-formyl-THF (25) and TS bound to 5,10-CH_2-H_4folate or analogues thereof (26), we were able to propose a tentative model for the binding 5,10-CH_2-H_4folate to KPHMT (SEQ ID NOs: 7-11, for example).

Next, using multiple sequence alignment (see Figure 5) to identify residues implicated in cofactor binding, we were able to fine tune the proposed model for cofactor binding. The fine tuned model is shown in Figures 10a and b which are side and top view stereo pair ribbon representations of the mouth of the binding cavity.

In this model, 5,10-CH_2-H_4folate (mTHF) binds near the entrance to the binding cavity at a depth of 15Å. The distance between the target carbon atoms, C11 in 5,10-CH_2-H_4folate and C3 in the substrate, is about 4.5Å, a favourable distance for a reaction to occur.

The cofactor makes relatively few contacts with the protein. Interestingly, these contacts are located in regions of undefined secondary structure, namely, the loop regions that compose the entrance to the binding cavity. The loops in question are between β5 and α7 (L1), α9 and α10 (L2) and the C-terminus (L3). Being regions of undefined secondary structure these loops may be highly flexible and thus, undergo structural changes upon cofactor binding. We have identified conserved residues that impart either flexibility or make strong interactions that may impart rigidity (definition) to these loops. Thus we believe that upon cofactor binding these loops undergo discrete structural changes.

Loop, L1, contains two of the six above-mentioned conserved motifs. The first half of this loop, is located deeper in the binding cavity and contains Gln 142, which H-bonds to the axial Mg^{2+} ligand, Asp 45. This half of the loop is probably rigid since it contains a turn between Asn 145 and Gly 149. The second half of the loop consists predominantly of the second motif. Both ends of this motif, namely residues Gly 148 (invariant) and Gly 154 may make this part of the loop flexible.

Gln 153 is implicated in a hydrogen bond to the amide of Lys 151, which upon cofactor binding may move to interact with the polyglutamate chain of the cofactor (see below for more discussion of this). Loop, L2, is relatively long with little sequence conservation. Invariant Gly 220 may impart some flexibility to this loop while residues Asp 217, Lys 228 and Phe 229 are implicated in binding the cofactor. In L3, invariant Pro 257 is in van der Waals contact with Gly 205 and Gln 211, while His 261 hydrogen bonds to Lys 228 and Glu 260. Thus, the deletion of Gly 168 in *A. nidulans* would lead to a distortion in the loop between β7 and β8 which may in turn lead to a disordering in adjacent loops such as L3 which could potentially prevent cofactor from binding. We, therefore propose that the *panB* auxotroph from *A. nidulans* is caused by the inability of the mutant KPHMT (SEQ ID NOs: 7-11, for example) enzyme to bind the cofactor and therefore to function.

There are four main protein-cofactor interactions, namely, three hydrogen bonds and a π-stacking interaction. The nitrogen atom at N2 of 5,10-CH_2-H_4folate hydrogen bonds to Asp 217, while the side chain carboxyl group of the first glutamate hydrogen bonds to the carboxyl group of Tyr 150, and Lys 228. A stronger interaction is a π-stacking or hydrophobic interaction between the *p*-aminobenzoic acid (PABA) ring of the cofactor and the highly conserved residues Tyr 150 and Phe 229. Tyr 150 or phenylalanine, which in this instance is a functional replacement, is found at this position in 31 out of the 35 KPHMT (SEQ ID NOs: 7-11, for example) sequences discussed above, while Phe 229 is found at this position in 34 out of the 35 KPHMT (SEQ ID NOs: 7-11, for example) sequences. Interestingly, crystal structures of the THF-dependent enzymes, TS and SHMT, with cofactor analogues bound, also implicate a π-stacking or hydrophobic interaction between the PABA ring and a tyrosine or phenylalanine (25). It would appear that nature has converged on this mechanism to bind folate cofactors.

Most folate-dependent enzymes have a higher affinity for the polyglutamate form of the folate cofactor, with the greatest increase in affinity occurring with two or three glutamate residues (27). Presumably, the polyglutamate tail increases the affinity for enzyme through interactions with surface positive charges. In the crystal structure of the bifunctional enzyme dihydrofolate reductase-thymidylate synthase from *Leishmania major*, the polyglutamate tail of dihydrofolate makes few specific contacts but rather is held in place by the positive charge of the local electrostatic field (28). We have identified four positive residues in KPHMT (SEQ ID NOs: 7-11, for example) that could interact with the polyglutamate tail. These are Lys 151, Arg 155 (in loop L1), Lys 231 (in loop L2) and His 261 (in loop L3).

KPHMT (SEQ ID NOs: 7-11, for example) Catalysis

KPHMT (SEQ ID NOs: 7-11, for example) catalyses the transfer of a hydroxymethyl group from cofactor (5,10-CH_2-H_4folate) to substrate (α-KIVA). The transferase reaction is an aldol reaction, namely deprotonation of the C3- carbon of α-KIVA followed by nucleophilic attack on the cofactor. The crystal structure of the apo enzyme gives insights in to the first stage in the enzyme mechanism, namely, activation of substrate and cofactor.

The C3 carbon is intrinsically acidic, through conjugation of the carboxyl and keto group, however, its acidity is enhanced by coordination of the substrate to the magnesium ion. Magnesium coordination also anchors and orients the substrate for subsequent deprotonation and nucleophilic attack. Also, the increase in distortion from octahedral geometry between substrate and product bound to the ion may be one mechanism by which the enzyme senses and releases product. The basic residue involved in abstraction of the C-3 proton of α-KIVA is believed to be Glu 181. The basicity of this residue is enhanced by a network of hydrogen bonds connecting residue Glu 181 with

residues His 136 and Lys112, which constitute an invariant triad. In the crystal structure of the apo enzyme, Glu 181 is involved in a hydrogen bond with the hydroxymethyl group of the product ketopantoate - giving rise to the greater distortion from octahedral geometry. A final role for this versatile residue is as the acid in the protonation of N10 of $5,10$-CH_2-H_4folate. Kallen and Jencks (29) have concluded that the reactive component of the $5,10$-CH_2-H_4folate cofactor is the iminium intermediate, formed by breakage of the C11-N10-bond and protonation of N10. This is supported by the crystal structure of TS from *Lactobacillus casei* where the imidazolidine ring has opened and the iminium intermediate has been hydrated (26). Thus, Glu 181 is believed to abstract a proton from α-KIVA and supply it to the cofactor.

Evidence for Cooperativity

KPHMT (SEQ ID NOs: 7-11, for example), the first enzyme in the pathway for the synthesis of pantothenic acid (see Figure 1), is inhibited by later intermediates, namely pantoate, pantothenate and CoA (1). This is most probably linked to the decameric architecture of the enzyme and involves multiple binding sites for effectors such as later pathway intermediates. All three, pantoate, pantothenate and CoA exhibit negative feedback, decreasing V_{max}, increasing K_m and enhancing cooperativity for the substrate. We believe we have found evidence, albeit tentative, of communication between protomers, a pre-requisite for cooperativity.

As pointed out earlier, the interface between protomers in the dimeric unit is tightly organised, involving 88 (20 hydrophilic and 68 hydrophobic) interactions. In particular one network of hydrogen bonds links the binding cavities of the vertically adjacent protomers. In the crystal structure of the apo enzyme, the products in the two vertically adjacent binding cavities are separated by only 31 Å. The H-bond network extends from ketopantoate to Ser 46 then Tyr 25 and His 68 of one

subunit to Tyr 67 then His 68 then Tyr 25 then Ser 46 and finally ketopantoate of the next subunit. In the multiple sequence alignment discussed above all residues except Tyr 67 are conserved. An interaction between Asp 26 of one subunit and His 68 of the next could replace this interaction in organisms where there is no residue at position 67 able to H-bond to His 68. The alternate H-bond network would then extend from keptanoate to Ser 46 then Tyr 25 then Asp 26 of one subunit to His 68 then Tyr 25 then Ser 46 and finally keptanoate of the next subunit (see Figure 11b which is a stereo pair ribbon representation of the binding cavities of a modified KPHMT (SEQ ID NOs: 7-11, for example) dimer).

We believe we have also identified communication between subunits within the same pentamer. This interface is close to the opening to the binding cavity, the C-terminus (loop, L3), loop, L1 and the N-terminus of the adjacent subunit (see Figure 11b which is a stereo pair ribbon representation of the interface between adjacent KPHMT (SEQ ID NOs: 7-11, for example) dimers). Binding of cofactor and substrate would affect the structure of loops, L1 and L3 and thus affect the interaction at this interface. Of particular note, is the region within loop, L1 consisting of residues Gly 138 to Glu 158. Residues, Gln 142 and Tyr 150 are respectively implicated in interacting with Mg^{2+} (indirectly) and cofactor. We have also identified a residue, Lys 151, that in the crystal structure of the apo enzyme H-bonds across the interface to Thr 5 of the adjacent dimer. We speculate that binding of cofactor will cause loop L1 to move in this region, the Lys 151 - Thr 5 interaction to break, and a new interaction between Lys 151 and the polyglutamate tail of the cofactor to form.

Structure-Based Drug Design

Determination of the 3D structure of KPHMT (SEQ ID NOs: 7-11, for example) provides important information about the binding sites of KPHMT (SEQ ID NOs: 7-11, for example),

particularly when comparisons are made with similar enzymes.
This information may then be used for rational design of KPHMT
(SEQ ID NOs: 7-11, for example) inhibitors, e.g. by
computational techniques which identify possible binding ligands
for the binding sites, by enabling linked-fragment approaches to
drug design, and by enabling the identification and location of
bound ligands using X-ray crystallographic analysis. These
techniques are discussed in more detail below.

Greer *et al.* describes an iterative approach to ligand
design based on repeated sequences of computer modelling,
protein-ligand complex formation and X-ray crystallographic or
NMR spectroscopic analysis. Thus novel thymidylate synthase
inhibitor series were designed *de novo* by Greer *et al.*, and
KPHMT (SEQ ID NOs: 7-11, for example) inhibitors may also be
designed in the this way. More specifically, using e.g. GRID on
the solved 3D structure of KPHMT (SEQ ID NOs: 7-11, for
example), a ligand (e.g. a potential inhibitor) for KPHMT (SEQ
ID NOs: 7-11, for example) may be designed that complements the
functionalities of the KPHMT (SEQ ID NOs: 7-11, for example)
binding site(s). The ligand can then be synthesised, formed
into a complex with KPHMT (SEQ ID NOs: 7-11, for example), and
the complex then analysed by X-ray crystallography to identify
the actual position of the bound ligand. The structure and/or
functional groups of the ligand can then be adjusted, if
necessary, in view of the results of the X-ray analysis, and the
synthesis and analysis sequence repeated until an optimised
ligand is obtained. Related approaches to structure-based drug
design are also discussed in Bohacek *et al.*, Medicinal Research
Reviews, Vol.16, (1996), 3-50.

As a result of the determination of the KPHMT (SEQ ID NOs:
7-11, for example) 3D structure, more purely computational
techniques for rational drug design may also be used to design
KPHMT (SEQ ID NOs: 7-11, for example) inhibitors (for an
overview of these techniques see e.g. Walters *et al.*). For
example, automated ligand-receptor docking programs (discussed

e.g. by Jones *et al.* in Current Opinion in Biotechnology, Vol.6, (1995), 652-656) which require accurate information on the atomic coordinates of target receptors may be used to design potential KPHMT (SEQ ID NOs: 7-11, for example) inhibitors.

Linked-fragment approaches to drug design also require accurate information on the atomic coordinates of target receptors. The basic idea behind these approaches is to determine (computationally or experimentally) the binding locations of plural ligands to a target molecule, and then construct a molecular scaffold to connect the ligands together in such a way that their relative binding positions are preserved. The connected ligands thus form a potential lead compound that can be further refined using e.g. the iterative technique of Greer *et al.*. For a virtual linked-fragment approach see Verlinde *et al.*, J. of Computer-Aided Molecular Design, 6, (1992), 131-147, and for NMR and X-ray approaches see Shuker *et al.*, Science, 274, (1996), 1531-1534 and Stout *et al.*, Structure, 6, (1998), 839-848. The use of these approaches to design KPHMT (SEQ ID NOs: 7-11, for example) inhibitors is made possible by the determination of the KPHMT (SEQ ID NOs: 7-11, for example) structure.

Many of the techniques and approaches to structure-based drug design described above rely at some stage on X-ray analysis to identify the binding position of a ligand in a ligand-protein complex. A common way of doing this is to perform X-ray crystallography on the complex, produce a difference Fourier electron density map, and associate a particular pattern of electron density with the ligand. However, in order to produce the map (as explained e.g. by Blundell *et al.*) it is necessary to know beforehand the protein 3D structure (or at least the protein structure factors). Therefore, determination of the KPHMT (SEQ ID NOs: 7-11, for example) structure also allows difference Fourier electron density maps of KPHMT (SEQ ID NOs: 7-11, for example)-ligand complexes to be produced, which can greatly assist the process of rational drug design.

The approaches to structure-based drug design described above all require initial identification of possible compounds for interaction with target bio-molecule (in this case KPHMT (SEQ ID NOs: 7-11, for example)). Sometimes these compounds are known e.g. from the research literature. However, when they are not, or when novel compounds are wanted, a first stage of the drug design program may involve computer-based *in silico* screening of compound databases (such as the Cambridge Structural Database) with the aim of identifying compounds which interact with the binding site or sites of the target bio-molecule. Screening selection criteria may be based on pharmacokinetic properties such as metabolic stability and toxicity. However, determination of the KPHMT (SEQ ID NOs: 7-11, for example) structure allows the architecture and chemical nature of each KPHMT (SEQ ID NOs: 7-11, for example) binding site to be identified, which in turn allows the geometric and functional constraints of a descriptor for the potential inhibitor to be derived. The descriptor is, therefore, a type of virtual 3-D pharmacophore, which can also be used as selection criteria or filter for database screening.

While the invention has been described in conjunction with the exemplary embodiments described above, many equivalent modifications and variations will be apparent to those skilled in the art when given this disclosure. Accordingly, the exemplary embodiments of the invention set forth are considered to be illustrative and not limiting. Various changes to the described embodiments may be made without departing from the spirit and scope of the invention.

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TABLE 1

```
REMARK coordinates from minimization and B-factor refinement
REMARK refinement resolution: 500.0 - 1.8 A
REMARK starting r= 0.2289 free_r= 0.2635
REMARK final     r= 0.2292 free_r= 0.2638
REMARK rmsd bonds= 0.005641  rmsd angles=  1.11562
REMARK B rmsd for bonded mainchain atoms=  1.325  target= 1.5
REMARK B rmsd for bonded sidechain atoms=  2.001  target= 2.0
REMARK B rmsd for angle mainchain atoms=  2.071  target= 2.0
REMARK B rmsd for angle sidechain atoms=  2.863  target= 2.5
REMARK target= mlf  final wa= 1.10321
REMARK final rweight=  0.0678 (with wa= 1.10321)
REMARK md-method= torsion  annealing schedule= constant
REMARK starting temperature= 1000  total md steps= 1 * 100
REMARK cycles= 2 coordinate steps= 20 B-factor steps= 10
REMARK sg= P2(1) a= 86.074 b= 157.17 c= 100.181 alpha= 90 beta= 97.44 gamma= 90
REMARK topology file 1  : CNS_TOPPAR:protein.top
REMARK topology file 2  : CNS_TOPPAR:dna-rna.top
REMARK topology file 3  : CNS_TOPPAR:water.top
REMARK topology file 4  : CNS_TOPPAR:ion.top
REMARK topology file 5  : ./TOPH_PARAM/kpl.toph
REMARK parameter file 1  : CNS_TOPPAR:protein_rep.param
REMARK parameter file 2  : CNS_TOPPAR:dna-rna_rep.param
REMARK parameter file 3  : CNS_TOPPAR:water_rep.param
REMARK parameter file 4  : CNS_TOPPAR:ion.param
REMARK parameter file 5  : ./TOPH_PARAM/kpl.param
REMARK molecular structure file: generate.mtf
REMARK input coordinates: generate.pdb
REMARK reflection file= ./int/panb.cv
REMARK ncs= none
REMARK B-correction resolution: 6.0 - 1.8
REMARK initial B-factor correction applied to fobs :
REMARK    B11=  -1.301 B22=  -2.124 B33=   3.425
REMARK    B12=   0.000 B13=   1.230 B23=   0.000
REMARK B-factor correction applied to coordinate array B:     0.254
REMARK bulk solvent: density level= 0.392735 e/A^3, B-factor= 64.4356 A^2
REMARK reflections with |Fobs|/sigma_F < 0.0 rejected
REMARK reflections with |Fobs| > 10000 * rms(Fobs) rejected
REMARK theoretical total number of refl. in resol. range:    243384 ( 100.0 % )
REMARK number of unobserved reflections (no entry or |F|=0):  14308 (   5.9 % )
REMARK number of reflections rejected:                            0 (   0.0 % )
REMARK total number of reflections used:                     229076 (  94.1 % )
REMARK number of reflections in working set:                 206168 (  84.7 % )
REMARK number of reflections in test set:                     22908 (   9.4 % )
CRYST1    86.074  157.170  100.181  90.00  97.44  90.00 P 21
REMARK FILENAME="refine.pdb"
REMARK DATE:17-Oct-00  01:40:10        created by user: inouet
REMARK VERSION:1.0
ATOM      1  CB  MET     1       1.201  12.262  69.884  1.00 67.43
ATOM      2  CG  MET     1       0.767  11.220  70.906  1.00 69.43
ATOM      3  SD  MET     1       1.582  11.428  72.507  1.00 72.24
ATOM      4  CE  MET     1       3.012  10.336  72.306  1.00 71.04
ATOM      5  C   MET     1       1.282  10.813  67.848  1.00 63.63
ATOM      6  O   MET     1       2.165  10.936  66.998  1.00 63.58
ATOM      7  N   MET     1      -0.854  11.909  68.546  1.00 65.98
ATOM      8  CA  MET     1       0.631  12.042  68.480  1.00 65.57
ATOM      9  N   LYS     2       0.841   9.631  68.271  1.00 61.39
ATOM     10  CA  LYS     2       1.376   8.379  67.750  1.00 58.18
ATOM     11  CB  LYS     2       1.946   7.518  68.886  1.00 59.31
ATOM     12  CG  LYS     2       3.141   8.121  69.610  1.00 60.51
ATOM     13  CD  LYS     2       3.805   7.096  70.523  1.00 61.39
ATOM     14  CE  LYS     2       2.844   6.572  71.585  1.00 62.31
ATOM     15  NZ  LYS     2       3.441   5.457  72.377  1.00 62.32
ATOM     16  C   LYS     2       0.313   7.577  67.003  1.00 54.66
ATOM     17  O   LYS     2      -0.258   6.631  67.548  1.00 55.68
ATOM     18  N   PRO     3       0.021   7.953  65.749  1.00 50.09
ATOM     19  CD  PRO     3      -0.580   7.007  64.792  1.00 49.24
ATOM     20  CA  PRO     3       0.633   9.074  65.034  1.00 45.89
ATOM     21  CB  PRO     3       0.847   8.501  63.644  1.00 47.20
ATOM     22  CG  PRO     3      -0.403   7.717  63.455  1.00 47.74
ATOM     23  C   PRO     3      -0.291  10.290  65.014  1.00 41.96
ATOM     24  O   PRO     3      -1.403  10.253  65.547  1.00 40.18
ATOM     25  N   THR     4       0.175  11.363  64.389  1.00 37.27
ATOM     26  CA  THR     4      -0.605  12.586  64.284  1.00 33.03
ATOM     27  CB  THR     4       0.316  13.808  64.214  1.00 32.00
ATOM     28  OG1 THR     4       1.113  13.866  65.403  1.00 29.60
```

ATOM	29	CG2	THR	4	-0.496	15.084	64.077	1.00	30.09
ATOM	30	C	THR	4	-1.436	12.516	63.012	1.00	31.90
ATOM	31	O	THR	4	-0.890	12.415	61.917	1.00	31.80
ATOM	32	N	THR	5	-2.755	12.574	63.156	1.00	30.88
ATOM	33	CA	THR	5	-3.636	12.494	61.999	1.00	29.95
ATOM	34	CB	THR	5	-4.616	11.320	62.137	1.00	30.13
ATOM	35	OG1	THR	5	-5.545	11.602	63.189	1.00	31.18
ATOM	36	CG2	THR	5	-3.864	10.035	62.462	1.00	29.84
ATOM	37	C	THR	5	-4.445	13.764	61.789	1.00	28.70
ATOM	38	O	THR	5	-4.407	14.684	62.605	1.00	28.11
ATOM	39	N	ILE	6	-5.184	13.804	60.685	1.00	28.91
ATOM	40	CA	ILE	6	-6.009	14.961	60.360	1.00	29.62
ATOM	41	CB	ILE	6	-6.777	14.749	59.042	1.00	30.80
ATOM	42	CG2	ILE	6	-7.445	16.047	58.617	1.00	29.12
ATOM	43	CG1	ILE	6	-5.813	14.298	57.945	1.00	33.13
ATOM	44	CD1	ILE	6	-6.513	13.840	56.671	1.00	34.94
ATOM	45	C	ILE	6	-7.016	15.189	61.477	1.00	29.79
ATOM	46	O	ILE	6	-7.339	16.327	61.813	1.00	30.34
ATOM	47	N	SER	7	-7.499	14.091	62.051	1.00	29.76
ATOM	48	CA	SER	7	-8.474	14.142	63.138	1.00	30.44
ATOM	49	CB	SER	7	-8.748	12.730	63.653	1.00	31.47
ATOM	50	OG	SER	7	-8.920	11.822	62.575	1.00	37.31
ATOM	51	C	SER	7	-7.954	15.006	64.285	1.00	29.13
ATOM	52	O	SER	7	-8.712	15.751	64.909	1.00	28.63
ATOM	53	N	LEU	8	-6.655	14.902	64.556	1.00	27.78
ATOM	54	CA	LEU	8	-6.035	15.668	65.630	1.00	27.46
ATOM	55	CB	LEU	8	-4.553	15.296	65.778	1.00	28.11
ATOM	56	CG	LEU	8	-3.954	15.254	67.190	1.00	30.83
ATOM	57	CD1	LEU	8	-2.452	15.499	67.105	1.00	30.15
ATOM	58	CD2	LEU	8	-4.594	16.302	68.086	1.00	32.65
ATOM	59	C	LEU	8	-6.141	17.173	65.378	1.00	26.61
ATOM	60	O	LEU	8	-6.388	17.943	66.303	1.00	26.41
ATOM	61	N	LEU	9	-5.951	17.589	64.129	1.00	23.76
ATOM	62	CA	LEU	9	-6.024	19.005	63.799	1.00	24.65
ATOM	63	CB	LEU	9	-5.388	19.279	62.431	1.00	22.20
ATOM	64	CG	LEU	9	-3.926	18.838	62.239	1.00	19.92
ATOM	65	CD1	LEU	9	-3.403	19.371	60.914	1.00	18.82
ATOM	66	CD2	LEU	9	-3.076	19.367	63.382	1.00	18.44
ATOM	67	C	LEU	9	-7.468	19.500	63.805	1.00	26.68
ATOM	68	O	LEU	9	-7.737	20.650	64.151	1.00	26.46
ATOM	69	N	GLN	10	-8.396	18.627	63.426	1.00	29.15
ATOM	70	CA	GLN	10	-9.808	18.990	63.403	1.00	32.76
ATOM	71	CB	GLN	10	-10.632	17.869	62.764	1.00	32.40
ATOM	72	CG	GLN	10	-12.091	18.220	62.511	1.00	34.98
ATOM	73	CD	GLN	10	-12.263	19.495	61.698	1.00	34.51
ATOM	74	OE1	GLN	10	-12.158	20.601	62.228	1.00	35.90
ATOM	75	NE2	GLN	10	-12.518	19.343	60.403	1.00	33.91
ATOM	76	C	GLN	10	-10.256	19.239	64.841	1.00	34.38
ATOM	77	O	GLN	10	-11.132	20.066	65.093	1.00	35.73
ATOM	78	N	LYS	11	-9.640	18.528	65.781	1.00	36.20
ATOM	79	CA	LYS	11	-9.961	18.694	67.193	1.00	37.50
ATOM	80	CB	LYS	11	-9.374	17.548	68.023	1.00	39.71
ATOM	81	CG	LYS	11	-9.466	17.788	69.526	1.00	42.23
ATOM	82	CD	LYS	11	-8.571	16.850	70.326	1.00	45.49
ATOM	83	CE	LYS	11	-9.131	15.436	70.387	1.00	47.75
ATOM	84	NZ	LYS	11	-8.313	14.563	71.283	1.00	48.44
ATOM	85	C	LYS	11	-9.378	20.016	67.677	1.00	37.17
ATOM	86	O	LYS	11	-9.988	20.721	68.483	1.00	38.57
ATOM	87	N	TYR	12	-8.189	20.345	67.181	1.00	36.59
ATOM	88	CA	TYR	12	-7.512	21.585	67.548	1.00	35.53
ATOM	89	CB	TYR	12	-6.145	21.665	66.864	1.00	36.51
ATOM	90	CG	TYR	12	-5.070	20.803	67.486	1.00	37.30
ATOM	91	CD1	TYR	12	-3.889	20.534	66.797	1.00	38.03
ATOM	92	CE1	TYR	12	-2.880	19.769	67.371	1.00	38.86
ATOM	93	CD2	TYR	12	-5.217	20.281	68.772	1.00	37.36
ATOM	94	CE2	TYR	12	-4.213	19.515	69.356	1.00	38.58
ATOM	95	CZ	TYR	12	-3.047	19.264	68.648	1.00	39.25
ATOM	96	OH	TYR	12	-2.044	18.514	69.220	1.00	40.19
ATOM	97	C	TYR	12	-8.324	22.815	67.169	1.00	34.82
ATOM	98	O	TYR	12	-8.451	23.748	67.960	1.00	34.13
ATOM	99	N	LYS	13	-8.860	22.822	65.953	1.00	34.10
ATOM	100	CA	LYS	13	-9.652	23.960	65.496	1.00	35.74
ATOM	101	CB	LYS	13	-10.087	23.765	64.041	1.00	34.52
ATOM	102	CG	LYS	13	-10.895	24.927	63.458	1.00	34.21
ATOM	103	CD	LYS	13	-11.268	24.645	62.001	1.00	31.63
ATOM	104	CE	LYS	13	-12.274	25.645	61.433	1.00	31.85
ATOM	105	NZ	LYS	13	-11.675	26.929	60.984	1.00	30.98

ATOM	106	C	LYS	13	-10.878	24.124	66.385	1.00	36.28
ATOM	107	O	LYS	13	-11.336	25.240	66.622	1.00	34.68
ATOM	108	N	GLN	14	-11.404	23.004	66.869	1.00	38.20
ATOM	109	CA	GLN	14	-12.572	23.018	67.744	1.00	40.77
ATOM	110	CB	GLN	14	-13.049	21.591	68.007	1.00	42.50
ATOM	111	CG	GLN	14	-13.662	20.906	66.800	1.00	47.11
ATOM	112	CD	GLN	14	-13.789	19.407	66.992	1.00	49.44
ATOM	113	OE1	GLN	14	-14.221	18.939	68.046	1.00	51.52
ATOM	114	NE2	GLN	14	-13.419	18.645	65.967	1.00	50.79
ATOM	115	C	GLN	14	-12.227	23.688	69.071	1.00	40.73
ATOM	116	O	GLN	14	-13.043	24.409	69.648	1.00	40.91
ATOM	117	N	GLU	15	-11.010	23.443	69.545	1.00	39.66
ATOM	118	CA	GLU	15	-10.544	24.008	70.805	1.00	39.32
ATOM	119	CB	GLU	15	-9.544	23.054	71.465	1.00	40.94
ATOM	120	CG	GLU	15	-10.012	21.607	71.509	1.00	43.66
ATOM	121	CD	GLU	15	-9.013	20.679	72.180	1.00	44.96
ATOM	122	OE1	GLU	15	-7.834	20.658	71.768	1.00	44.85
ATOM	123	OE2	GLU	15	-9.409	19.959	73.121	1.00	48.88
ATOM	124	C	GLU	15	-9.880	25.357	70.567	1.00	38.67
ATOM	125	O	GLU	15	-9.381	25.985	71.502	1.00	38.21
ATOM	126	N	LYS	16	-9.889	25.803	69.313	1.00	37.45
ATOM	127	CA	LYS	16	-9.269	27.069	68.939	1.00	36.93
ATOM	128	CB	LYS	16	-9.957	28.235	69.655	1.00	39.24
ATOM	129	CG	LYS	16	-10.820	29.105	68.748	1.00	42.46
ATOM	130	CD	LYS	16	-9.963	29.912	67.783	1.00	44.77
ATOM	131	CE	LYS	16	-10.809	30.700	66.794	1.00	45.69
ATOM	132	NZ	LYS	16	-11.734	31.653	67.466	1.00	45.98
ATOM	133	C	LYS	16	-7.777	27.055	69.272	1.00	35.34
ATOM	134	O	LYS	16	-7.170	28.103	69.507	1.00	34.70
ATOM	135	N	'LYS	17	-7.186	25.865	69.304	1.00	33.29
ATOM	136	CA	LYS	17	-5.759	25.752	69.593	1.00	32.28
ATOM	137	CB	LYS	17	-5.440	24.423	70.285	1.00	34.01
ATOM	138	CG	LYS	17	-3.951	24.238	70.580	1.00	36.37
ATOM	139	CD	LYS	17	-3.618	22.820	71.033	1.00	39.39
ATOM	140	CE	LYS	17	-4.198	22.504	72.405	1.00	41.80
ATOM	141	NZ	LYS	17	-3.935	21.089	72.804	1.00	42.95
ATOM	142	C	LYS	17	-4.955	25.854	68.298	1.00	30.45
ATOM	143	O	LYS	17	-4.935	24.923	67.495	1.00	29.95
ATOM	144	N	ARG	18	-4.299	26.993	68.103	1.00	28.24
ATOM	145	CA	ARG	18	-3.486	27.224	66.913	1.00	27.71
ATOM	146	CB	ARG	18	-3.084	28.693	66.841	1.00	26.93
ATOM	147	CG	ARG	18	-4.213	29.588	66.366	1.00	29.98
ATOM	148	CD	ARG	18	-3.904	31.058	66.576	1.00	31.56
ATOM	149	NE	ARG	18	-3.975	31.427	67.989	1.00	33.11
ATOM	150	CZ	ARG	18	-3.874	32.673	68.437	1.00	34.92
ATOM	151	NH1	ARG	18	-3.694	33.671	67.580	1.00	34.93
ATOM	152	NH2	ARG	18	-3.961	32.921	69.736	1.00	33.10
ATOM	153	C	ARG	18	-2.249	26.329	66.912	1.00	26.09
ATOM	154	O	ARG	18	-1.455	26.357	67.852	1.00	27.27
ATOM	155	N	PHE	19	-2.093	25.546	65.845	1.00	24.65
ATOM	156	CA	PHE	19	-0.983	24.601	65.710	1.00	21.83
ATOM	157	CB	PHE	19	-1.543	23.213	65.386	1.00	22.18
ATOM	158	CG	PHE	19	-2.394	23.176	64.147	1.00	21.17
ATOM	159	CD1	PHE	19	-1.813	23.054	62.885	1.00	21.71
ATOM	160	CD2	PHE	19	-3.779	23.275	64.240	1.00	21.90
ATOM	161	CE1	PHE	19	-2.604	23.036	61.730	1.00	20.83
ATOM	162	CE2	PHE	19	-4.582	23.259	63.095	1.00	20.74
ATOM	163	CZ	PHE	19	-3.995	23.137	61.837	1.00	22.45
ATOM	164	C	PHE	19	0.075	24.985	64.678	1.00	20.64
ATOM	165	O	PHE	19	-0.208	25.687	63.708	1.00	20.24
ATOM	166	N	ALA	20	1.298	24.509	64.894	1.00	17.95
ATOM	167	CA	ALA	20	2.409	24.801	63.994	1.00	18.49
ATOM	168	CB	ALA	20	3.671	25.051	64.808	1.00	16.95
ATOM	169	C	ALA	20	2.676	23.705	62.959	1.00	17.84
ATOM	170	O	ALA	20	2.563	22.515	63.253	1.00	19.20
ATOM	171	N	THR	21	3.035	24.126	61.750	1.00	19.33
ATOM	172	CA	THR	21	3.351	23.211	60.654	1.00	21.03
ATOM	173	CB	THR	21	2.235	23.215	59.595	1.00	22.40
ATOM	174	OG1	THR	21	1.013	22.766	60.201	1.00	25.51
ATOM	175	CG2	THR	21	2.583	22.298	58.449	1.00	28.47
ATOM	176	C	THR	21	4.667	23.668	60.022	1.00	18.87
ATOM	177	O	THR	21	5.028	24.846	60.095	1.00	19.63
ATOM	178	N	ILE	22	5.391	22.757	59.387	1.00	17.33
ATOM	179	CA	ILE	22	6.672	23.156	58.822	1.00	16.75
ATOM	180	CB	ILE	22	7.761	23.058	59.915	1.00	16.67
ATOM	181	CG2	ILE	22	8.068	21.593	60.208	1.00	16.67
ATOM	182	CG1	ILE	22	9.009	23.833	59.492	1.00	18.38

ATOM	183	CD1	ILE	22	9.959	24.160	60.653	1.00	19.13
ATOM	184	C	ILE	22	7.068	22.314	57.617	1.00	16.22
ATOM	185	O	ILE	22	6.592	21.194	57.459	1.00	16.81
ATOM	186	N	THR	23	7.911	22.868	56.754	1.00	15.76
ATOM	187	CA	THR	23	8.357	22.119	55.586	1.00	19.36
ATOM	188	CB	THR	23	8.756	23.061	54.409	1.00	18.72
ATOM	189	OG1	THR	23	10.010	23.697	54.692	1.00	23.35
ATOM	190	CG2	THR	23	7.699	24.155	54.216	1.00	23.17
ATOM	191	C	THR	23	9.564	21.285	56.014	1.00	18.45
ATOM	192	O	THR	23	10.274	21.643	56.954	1.00	18.13
ATOM	193	N	ALA	24	9.772	20.155	55.343	1.00	17.71
ATOM	194	CA	ALA	24	10.897	19.276	55.633	1.00	16.52
ATOM	195	CB	ALA	24	10.575	18.345	56.796	1.00	16.73
ATOM	196	C	ALA	24	11.132	18.483	54.358	1.00	15.72
ATOM	197	O	ALA	24	10.181	18.183	53.634	1.00	13.61
ATOM	198	N	TYR	25	12.387	18.148	54.079	1.00	15.44
ATOM	199	CA	TYR	25	12.713	17.420	52.859	1.00	15.30
ATOM	200	CB	TYR	25	13.205	18.389	51.780	1.00	16.75
ATOM	201	CG	TYR	25	12.454	19.697	51.729	1.00	19.07
ATOM	202	CD1	TYR	25	12.934	20.822	52.402	1.00	17.12
ATOM	203	CE1	TYR	25	12.240	22.026	52.379	1.00	22.53
ATOM	204	CD2	TYR	25	11.255	19.808	51.028	1.00	17.14
ATOM	205	CE2	TYR	25	10.546	21.010	50.999	1.00	21.05
ATOM	206	CZ	TYR	25	11.044	22.114	51.678	1.00	22.44
ATOM	207	OH	TYR	25	10.347	23.300	51.669	1.00	25.31
ATOM	208	C	TYR	25	13.785	16.359	53.068	1.00	17.26
ATOM	209	O	TYR	25	14.327	15.837	52.094	1.00	16.21
ATOM	210	N	ASP	26	14.101	16.051	54.320	1.00	15.99
ATOM	211	CA	ASP	26	15.121	15.059	54.604	1.00	16.04
ATOM	212	CB	ASP	26	16.511	15.686	54.453	1.00	14.69
ATOM	213	CG	ASP	26	16.803	16.751	55.507	1.00	16.04
ATOM	214	OD1	ASP	26	17.002	16.391	56.679	1.00	17.13
ATOM	215	OD2	ASP	26	16.829	17.935	55.144	1.00	14.58
ATOM	216	C	ASP	26	14.967	14.426	55.981	1.00	16.01
ATOM	217	O	ASP	26	14.182	14.888	56.813	1.00	16.69
ATOM	218	N	TYR	27	15.718	13.353	56.214	1.00	13.50
ATOM	219	CA	TYR	27	15.660	12.625	57.474	1.00	15.85
ATOM	220	CB	TYR	27	16.591	11.412	57.408	1.00	16.76
ATOM	221	CG	TYR	27	16.777	10.693	58.727	1.00	17.84
ATOM	222	CD1	TYR	27	15.871	9.723	59.150	1.00	17.06
ATOM	223	CE1	TYR	27	16.053	9.046	60.353	1.00	18.09
ATOM	224	CD2	TYR	27	17.873	10.975	59.546	1.00	19.28
ATOM	225	CE2	TYR	27	18.065	10.311	60.748	1.00	20.21
ATOM	226	CZ	TYR	27	17.163	9.350	61.151	1.00	20.97
ATOM	227	OH	TYR	27	17.368	8.691	62.342	1.00	21.54
ATOM	228	C	TYR	27	16.056	13.482	58.671	1.00	15.76
ATOM	229	O	TYR	27	15.338	13.544	59.670	1.00	16.46
ATOM	230	N	SER	28	17.216	14.121	58.560	1.00	16.97
ATOM	231	CA	SER	28	17.763	14.943	59.630	1.00	17.00
ATOM	232	CB	SER	28	19.034	15.643	59.146	1.00	19.12
ATOM	233	OG	SER	28	20.029	14.671	58.842	1.00	22.00
ATOM	234	C	SER	28	16.798	15.957	60.222	1.00	17.23
ATOM	235	O	SER	28	16.485	15.905	61.422	1.00	16.02
ATOM	236	N	PHE	29	16.307	16.881	59.408	1.00	15.80
ATOM	237	CA	PHE	29	15.382	17.864	59.965	1.00	16.28
ATOM	238	CB	PHE	29	15.181	19.025	59.000	1.00	14.20
ATOM	239	CG	PHE	29	16.321	19.988	59.001	1.00	15.71
ATOM	240	CD1	PHE	29	17.354	19.871	58.075	1.00	14.27
ATOM	241	CD2	PHE	29	16.371	21.008	59.946	1.00	13.32
ATOM	242	CE1	PHE	29	18.423	20.764	58.080	1.00	15.74
ATOM	243	CE2	PHE	29	17.430	21.904	59.967	1.00	17.20
ATOM	244	CZ	PHE	29	18.463	21.787	59.031	1.00	14.83
ATOM	245	C	PHE	29	14.044	17.284	60.383	1.00	15.83
ATOM	246	O	PHE	29	13.481	17.696	61.398	1.00	16.89
ATOM	247	N	ALA	30	13.532	16.326	59.618	1.00	16.16
ATOM	248	CA	ALA	30	12.256	15.718	59.962	1.00	17.31
ATOM	249	CB	ALA	30	11.887	14.649	58.925	1.00	16.54
ATOM	250	C	ALA	30	12.343	15.094	61.357	1.00	17.30
ATOM	251	O	ALA	30	11.404	15.171	62.155	1.00	16.42
ATOM	252	N	LYS	31	13.481	14.467	61.634	1.00	16.26
ATOM	253	CA	LYS	31	13.731	13.815	62.918	1.00	17.07
ATOM	254	CB	LYS	31	15.062	13.063	62.852	1.00	18.24
ATOM	255	CG	LYS	31	15.491	12.386	64.146	1.00	24.20
ATOM	256	CD	LYS	31	14.608	11.203	64.469	1.00	27.80
ATOM	257	CE	LYS	31	15.306	10.248	65.425	1.00	30.36
ATOM	258	NZ	LYS	31	15.724	10.913	66.697	1.00	32.82
ATOM	259	C	LYS	31	13.788	14.833	64.057	1.00	17.16

ATOM	260	O	LYS	31	13.250	14.608	65.147	1.00	18.34
ATOM	261	N	LEU	32	14.468	15.941	63.790	1.00	18.82
ATOM	262	CA	LEU	32	14.631	17.019	64.756	1.00	18.15
ATOM	263	CB	LEU	32	15.549	18.097	64.171	1.00	17.24
ATOM	264	CG	LEU	32	16.070	19.200	65.113	1.00	18.88
ATOM	265	CD1	LEU	32	17.356	19.769	64.556	1.00	17.20
ATOM	266	CD2	LEU	32	15.008	20.292	65.280	1.00	18.78
ATOM	267	C	LEU	32	13.272	17.620	65.103	1.00	18.02
ATOM	268	O	LEU	32	12.963	17.847	66.272	1.00	17.18
ATOM	269	N	PHE	33	12.462	17.885	64.083	1.00	17.34
ATOM	270	CA	PHE	33	11.144	18.473	64.316	1.00	18.21
ATOM	271	CB	PHE	33	10.451	18.832	62.995	1.00	15.31
ATOM	272	CG	PHE	33	11.255	19.734	62.092	1.00	14.93
ATOM	273	CD1	PHE	33	12.133	20.689	62.610	1.00	14.65
ATOM	274	CD2	PHE	33	11.093	19.657	60.716	1.00	13.00
ATOM	275	CE1	PHE	33	12.832	21.550	61.764	1.00	13.96
ATOM	276	CE2	PHE	33	11.783	20.510	59.861	1.00	9.75
ATOM	277	CZ	PHE	33	12.657	21.461	60.389	1.00	14.73
ATOM	278	C	PHE	33	10.255	17.503	65.091	1.00	18.11
ATOM	279	O	PHE	33	9.582	17.892	66.048	1.00	17.51
ATOM	280	N	ALA	34	10.246	16.241	64.666	1.00	18.42
ATOM	281	CA	ALA	34	9.433	15.231	65.330	1.00	19.46
ATOM	282	CB	ALA	34	9.573	13.878	64.623	1.00	20.93
ATOM	283	C	ALA	34	9.828	15.098	66.799	1.00	20.01
ATOM	284	O	ALA	34	8.970	15.000	67.673	1.00	19.41
ATOM	285	N	ASP	35	11.125	15.101	67.074	1.00	22.13
ATOM	286	CA	ASP	35	11.574	14.972	68.449	1.00	24.53
ATOM	287	CB	ASP	35	13.086	14.788	68.503	1.00	25.01
ATOM	288	CG	ASP	35	13.522	13.424	67.989	1.00	27.07
ATOM	289	OD1	ASP	35	12.665	12.519	67.898	1.00	28.23
ATOM	290	OD2	ASP	35	14.720	13.261	67.694	1.00	28.18
ATOM	291	C	ASP	35	11.156	16.151	69.324	1.00	23.50
ATOM	292	O	ASP	35	11.086	16.024	70.545	1.00	24.71
ATOM	293	N	GLU	36	10.872	17.294	68.706	1.00	24.53
ATOM	294	CA	GLU	36	10.455	18.469	69.464	1.00	23.98
ATOM	295	CB	GLU	36	11.029	19.743	68.841	1.00	25.45
ATOM	296	CG	GLU	36	12.535	19.876	68.963	1.00	25.52
ATOM	297	CD	GLU	36	13.005	19.750	70.399	1.00	26.66
ATOM	298	OE1	GLU	36	12.385	20.375	71.286	1.00	23.68
ATOM	299	OE2	GLU	36	13.993	19.032	70.637	1.00	27.91
ATOM	300	C	GLU	36	8.937	18.588	69.553	1.00	23.45
ATOM	301	O	GLU	36	8.421	19.502	70.192	1.00	23.61
ATOM	302	N	GLY	37	8.221	17.672	68.908	1.00	22.87
ATOM	303	CA	GLY	37	6.765	17.721	68.955	1.00	22.54
ATOM	304	C	GLY	37	6.096	18.447	67.796	1.00	19.79
ATOM	305	O	GLY	37	4.902	18.741	67.845	1.00	21.78
ATOM	306	N	LEU	38	6.873	18.755	66.765	1.00	19.44
ATOM	307	CA	LEU	38	6.365	19.416	65.569	1.00	19.71
ATOM	308	CB	LEU	38	7.459	20.281	64.952	1.00	20.11
ATOM	309	CG	LEU	38	7.131	21.691	64.458	1.00	22.03
ATOM	310	CD1	LEU	38	8.352	22.238	63.739	1.00	20.65
ATOM	311	CD2	LEU	38	5.918	21.714	63.548	1.00	20.80
ATOM	312	C	LEU	38	6.057	18.222	64.664	1.00	20.90
ATOM	313	O	LEU	38	6.938	17.741	63.939	1.00	18.42
ATOM	314	N	ASN	39	4.807	17.762	64.720	1.00	20.83
ATOM	315	CA	ASN	39	4.355	16.573	63.999	1.00	21.62
ATOM	316	CB	ASN	39	3.489	15.709	64.924	1.00	24.31
ATOM	317	CG	ASN	39	4.128	15.480	66.281	1.00	28.12
ATOM	318	OD1	ASN	39	5.334	15.252	66.377	1.00	28.10
ATOM	319	ND2	ASN	39	3.321	15.526	67.338	1.00	29.42
ATOM	320	C	ASN	39	3.593	16.766	62.696	1.00	19.52
ATOM	321	O	ASN	39	2.955	15.832	62.221	1.00	19.99
ATOM	322	N	VAL	40	3.648	17.961	62.123	1.00	19.39
ATOM	323	CA	VAL	40	2.960	18.221	60.869	1.00	18.52
ATOM	324	CB	VAL	40	1.799	19.213	61.056	1.00	19.51
ATOM	325	CG1	VAL	40	1.113	19.470	59.726	1.00	18.68
ATOM	326	CG2	VAL	40	0.801	18.659	62.066	1.00	18.86
ATOM	327	C	VAL	40	3.967	18.785	59.888	1.00	18.22
ATOM	328	O	VAL	40	4.450	19.910	60.040	1.00	14.68
ATOM	329	N	MET	41	4.280	17.990	58.869	1.00	16.95
ATOM	330	CA	MET	41	5.271	18.398	57.892	1.00	16.29
ATOM	331	CB	MET	41	6.535	17.556	58.082	1.00	16.97
ATOM	332	CG	MET	41	7.255	17.864	59.392	1.00	20.16
ATOM	333	SD	MET	41	8.564	16.706	59.719	1.00	19.46
ATOM	334	CE	MET	41	7.955	15.899	61.206	1.00	21.43
ATOM	335	C	MET	41	4.804	18.342	56.452	1.00	16.56
ATOM	336	O	MET	41	4.046	17.464	56.062	1.00	18.81

ATOM	337	N	LEU	42	5.276	19.300	55.665	1.00	18.90
ATOM	338	CA	LEU	42	4.907	19.383	54.265	1.00	20.11
ATOM	339	CB	LEU	42	4.178	20.707	54.016	1.00	22.93
ATOM	340	CG	LEU	42	3.677	21.143	52.630	1.00	26.24
ATOM	341	CD1	LEU	42	4.777	21.879	51.907	1.00	29.83
ATOM	342	CD2	LEU	42	3.169	19.955	51.818	1.00	24.10
ATOM	343	C	LEU	42	6.120	19.258	53.344	1.00	19.47
ATOM	344	O	LEU	42	7.106	19.978	53.488	1.00	17.61
ATOM	345	N	VAL	43	6.045	18.313	52.414	1.00	19.14
ATOM	346	CA	VAL	43	7.102	18.116	51.429	1.00	18.25
ATOM	347	CB	VAL	43	7.332	16.624	51.126	1.00	19.90
ATOM	348	CG1	VAL	43	8.397	16.461	50.041	1.00	19.97
ATOM	349	CG2	VAL	43	7.752	15.895	52.395	1.00	19.98
ATOM	350	C	VAL	43	6.517	18.806	50.208	1.00	18.93
ATOM	351	O	VAL	43	5.815	18.187	49.408	1.00	17.33
ATOM	352	N	GLY	44	6.786	20.102	50.089	1.00	17.93
ATOM	353	CA	GLY	44	6.248	20.865	48.980	1.00	20.04
ATOM	354	C	GLY	44	7.226	21.095	47.854	1.00	18.04
ATOM	355	O	GLY	44	8.430	20.872	48.008	1.00	17.40
ATOM	356	N	ASP	45	6.715	21.557	46.718	1.00	18.65
ATOM	357	CA	ASP	45	7.583	21.796	45.575	1.00	20.74
ATOM	358	CB	ASP	45	6.764	21.936	44.279	1.00	21.58
ATOM	359	CG	ASP	45	5.684	22.997	44.372	1.00	23.34
ATOM	360	OD1	ASP	45	5.672	23.751	45.359	1.00	22.56
ATOM	361	OD2	ASP	45	4.858	23.074	43.442	1.00	21.88
ATOM	362	C	ASP	45	8.483	23.007	45.776	1.00	19.43
ATOM	363	O	ASP	45	9.243	23.374	44.883	1.00	19.95
ATOM	364	N	SER	46	8.408	23.635	46.949	1.00	20.64
ATOM	365	CA	SER	46	9.285	24.772	47.211	1.00	19.31
ATOM	366	CB	SER	46	8.944	25.429	48.551	1.00	19.58
ATOM	367	OG	SER	46	9.146	24.533	49.628	1.00	20.11
ATOM	368	C	SER	46	10.705	24.206	47.243	1.00	19.27
ATOM	369	O	SER	46	11.686	24.945	47.155	1.00	20.36
ATOM	370	N	LEU	47	10.810	22.884	47.365	1.00	18.59
ATOM	371	CA	LEU	47	12.119	22.237	47.384	1.00	19.25
ATOM	372	CB	LEU	47	11.970	20.737	47.661	1.00	18.00
ATOM	373	CG	LEU	47	11.308	19.853	46.597	1.00	17.40
ATOM	374	CD1	LEU	47	12.309	19.517	45.489	1.00	15.15
ATOM	375	CD2	LEU	47	10.822	18.572	47.255	1.00	16.79
ATOM	376	C	LEU	47	12.853	22.467	46.063	1.00	17.82
ATOM	377	O	LEU	47	14.083	22.399	46.004	1.00	17.99
ATOM	378	N	GLY	48	12.100	22.742	45.001	1.00	17.81
ATOM	379	CA	GLY	48	12.720	22.997	43.708	1.00	16.18
ATOM	380	C	GLY	48	13.659	24.186	43.784	1.00	18.66
ATOM	381	O	GLY	48	14.644	24.271	43.050	1.00	17.89
ATOM	382	N	MET	49	13.356	25.108	44.691	1.00	19.84
ATOM	383	CA	MET	49	14.172	26.303	44.865	1.00	20.69
ATOM	384	CB	MET	49	13.263	27.515	45.100	1.00	23.46
ATOM	385	CG	MET	49	12.312	27.789	43.940	1.00	25.97
ATOM	386	SD	MET	49	11.099	29.069	44.266	1.00	31.34
ATOM	387	CE	MET	49	12.037	30.520	43.900	1.00	32.33
ATOM	388	C	MET	49	15.162	26.153	46.022	1.00	20.49
ATOM	389	O	MET	49	16.370	26.292	45.837	1.00	22.08
ATOM	390	N	THR	50	14.649	25.846	47.208	1.00	21.41
ATOM	391	CA	THR	50	15.492	25.702	48.387	1.00	21.56
ATOM	392	CB	THR	50	14.636	25.608	49.655	1.00	25.24
ATOM	393	OG1	THR	50	15.493	25.523	50.801	1.00	31.31
ATOM	394	CG2	THR	50	13.750	24.381	49.600	1.00	23.80
ATOM	395	C	THR	50	16.432	24.498	48.362	1.00	21.30
ATOM	396	O	THR	50	17.551	24.565	48.864	1.00	21.10
ATOM	397	N	VAL	51	15.975	23.391	47.787	1.00	18.20
ATOM	398	CA	VAL	51	16.812	22.200	47.719	1.00	19.81
ATOM	399	CB	VAL	51	15.997	20.918	47.983	1.00	18.02
ATOM	400	CG1	VAL	51	16.909	19.695	47.900	1.00	23.01
ATOM	401	CG2	VAL	51	15.355	20.983	49.365	1.00	21.92
ATOM	402	C	VAL	51	17.536	22.038	46.384	1.00	18.45
ATOM	403	O	VAL	51	18.755	21.867	46.351	1.00	16.95
ATOM	404	N	GLN	52	16.788	22.087	45.286	1.00	17.92
ATOM	405	CA	GLN	52	17.381	21.907	43.963	1.00	18.16
ATOM	406	CB	GLN	52	16.312	21.427	42.976	1.00	17.32
ATOM	407	CG	GLN	52	15.529	20.227	43.482	1.00	16.59
ATOM	408	CD	GLN	52	14.477	19.771	42.504	1.00	15.57
ATOM	409	OE1	GLN	52	14.011	20.552	41.673	1.00	16.27
ATOM	410	NE2	GLN	52	14.084	18.504	42.600	1.00	14.83
ATOM	411	C	GLN	52	18.076	23.150	43.411	1.00	18.00
ATOM	412	O	GLN	52	19.003	23.052	42.606	1.00	18.07
ATOM	413	N	GLY	53	17.624	24.324	43.831	1.00	19.93

ATOM	414	CA	GLY	53	18.248	25.549	43.361	1.00	20.83
ATOM	415	C	GLY	53	17.685	26.146	42.085	1.00	22.32
ATOM	416	O	GLY	53	18.387	26.877	41.387	1.00	24.49
ATOM	417	N	HIS	54	16.429	25.849	41.771	1.00	22.93
ATOM	418	CA	HIS	54	15.803	26.397	40.575	1.00	24.27
ATOM	419	CB	HIS	54	14.725	25.438	40.049	1.00	23.64
ATOM	420	CG	HIS	54	15.264	24.127	39.568	1.00	25.03
ATOM	421	CD2	HIS	54	15.030	22.860	39.984	1.00	25.14
ATOM	422	ND1	HIS	54	16.175	24.029	38.538	1.00	25.82
ATOM	423	CE1	HIS	54	16.481	22.759	38.343	1.00	26.94
ATOM	424	NE2	HIS	54	15.800	22.029	39.208	1.00	26.01
ATOM	425	C	HIS	54	15.176	27.748	40.914	1.00	25.18
ATOM	426	O	HIS	54	14.947	28.058	42.086	1.00	24.14
ATOM	427	N	ASP	55	14.898	28.545	39.884	1.00	25.82
ATOM	428	CA	ASP	55	14.302	29.869	40.062	1.00	27.59
ATOM	429	CB	ASP	55	14.550	30.729	38.813	1.00	30.40
ATOM	430	CG	ASP	55	13.786	30.232	37.600	1.00	33.05
ATOM	431	OD1	ASP	55	12.535	30.266	37.622	1.00	36.66
ATOM	432	OD2	ASP	55	14.428	29.804	36.618	1.00	37.40
ATOM	433	C	ASP	55	12.801	29.778	40.333	1.00	26.78
ATOM	434	O	ASP	55	12.174	30.755	40.737	1.00	27.57
ATOM	435	N	SER	56	12.228	28.600	40.099	1.00	25.17
ATOM	436	CA	SER	56	10.802	28.386	40.322	1.00	21.97
ATOM	437	CB	SER	56	10.008	28.635	39.036	1.00	21.35
ATOM	438	OG	SER	56	10.232	27.608	38.084	1.00	21.31
ATOM	439	C	SER	56	10.582	26.956	40.795	1.00	20.02
ATOM	440	O	SER	56	11.529	26.177	40.903	1.00	21.16
ATOM	441	N	THR	57	9.334	26.615	41.084	1.00	19.01
ATOM	442	CA	THR	57	9.007	25.272	41.543	1.00	19.21
ATOM	443	CB	THR	57	7.869	25.305	42.579	1.00	19.53
ATOM	444	OG1	THR	57	6.686	25.840	41.972	1.00	20.97
ATOM	445	CG2	THR	57	8.249	26.179	43.772	1.00	19.07
ATOM	446	C	THR	57	8.560	24.359	40.396	1.00	18.44
ATOM	447	O	THR	57	8.422	23.153	40.587	1.00	18.34
ATOM	448	N	LEU	58	8.341	24.930	39.212	1.00	20.59
ATOM	449	CA	LEU	58	7.868	24.149	38.062	1.00	20.34
ATOM	450	CB	LEU	58	7.720	25.029	36.816	1.00	20.92
ATOM	451	CG	LEU	58	6.542	26.005	36.785	1.00	23.24
ATOM	452	CD1	LEU	58	6.926	27.242	37.578	1.00	25.30
ATOM	453	CD2	LEU	58	6.195	26.393	35.349	1.00	23.02
ATOM	454	C	LEU	58	8.687	22.913	37.696	1.00	21.07
ATOM	455	O	LEU	58	8.120	21.868	37.366	1.00	19.23
ATOM	456	N	PRO	59	10.025	23.015	37.731	1.00	20.10
ATOM	457	CD	PRO	59	10.845	24.213	37.965	1.00	23.05
ATOM	458	CA	PRO	59	10.862	21.860	37.392	1.00	21.47
ATOM	459	CB	PRO	59	12.286	22.433	37.427	1.00	21.53
ATOM	460	CG	PRO	59	12.167	23.617	38.335	1.00	25.99
ATOM	461	C	PRO	59	10.678	20.653	38.307	1.00	18.05
ATOM	462	O	PRO	59	11.041	19.534	37.946	1.00	18.36
ATOM	463	N	VAL	60	10.100	20.865	39.486	1.00	17.05
ATOM	464	CA	VAL	60	9.882	19.760	40.423	1.00	16.87
ATOM	465	CB	VAL	60	9.330	20.273	41.785	1.00	15.81
ATOM	466	CG1	VAL	60	9.046	19.099	42.709	1.00	15.77
ATOM	467	CG2	VAL	60	10.336	21.201	42.438	1.00	15.49
ATOM	468	C	VAL	60	8.894	18.740	39.852	1.00	17.60
ATOM	469	O	VAL	60	7.805	19.099	39.406	1.00	16.90
ATOM	470	N	THR	61	9.267	17.465	39.876	1.00	18.90
ATOM	471	CA	THR	61	8.389	16.420	39.352	1.00	20.57
ATOM	472	CB	THR	61	9.124	15.590	38.252	1.00	24.68
ATOM	473	OG1	THR	61	9.451	16.440	37.146	1.00	30.75
ATOM	474	CG2	THR	61	8.261	14.425	37.760	1.00	30.08
ATOM	475	C	THR	61	7.906	15.507	40.487	1.00	17.77
ATOM	476	O	THR	61	8.408	15.581	41.606	1.00	16.02
ATOM	477	N	VAL	62	6.919	14.662	40.196	1.00	15.87
ATOM	478	CA	VAL	62	6.360	13.734	41.177	1.00	15.01
ATOM	479	CB	VAL	62	5.269	12.834	40.532	1.00	13.13
ATOM	480	CG1	VAL	62	4.831	11.742	41.512	1.00	13.60
ATOM	481	CG2	VAL	62	4.070	13.696	40.116	1.00	13.51
ATOM	482	C	VAL	62	7.428	12.837	41.784	1.00	15.22
ATOM	483	O	VAL	62	7.390	12.529	42.978	1.00	16.66
ATOM	484	N	ALA	63	8.383	12.412	40.965	1.00	15.74
ATOM	485	CA	ALA	63	9.445	11.551	41.467	1.00	14.86
ATOM	486	CB	ALA	63	10.383	11.137	40.319	1.00	16.20
ATOM	487	C	ALA	63	10.230	12.264	42.562	1.00	13.05
ATOM	488	O	ALA	63	10.579	11.655	43.573	1.00	13.87
ATOM	489	N	ASP	64	10.505	13.551	42.363	1.00	14.03
ATOM	490	CA	ASP	64	11.258	14.319	43.357	1.00	14.19

ATOM	491	CB	ASP	64	11.507	15.762	42.890	1.00	13.98
ATOM	492	CG	ASP	64	12.309	15.849	41.605	1.00	14.58
ATOM	493	OD1	ASP	64	13.170	14.975	41.351	1.00	15.44
ATOM	494	OD2	ASP	64	12.093	16.829	40.846	1.00	17.47
ATOM	495	C	ASP	64	10.492	14.355	44.679	1.00	14.42
ATOM	496	O	ASP	64	11.072	14.125	45.740	1.00	12.00
ATOM	497	N	ILE	65	9.194	14.649	44.618	1.00	13.48
ATOM	498	CA	ILE	65	8.374	14.705	45.827	1.00	13.80
ATOM	499	CB	ILE	65	6.899	15.082	45.504	1.00	11.05
ATOM	500	CG2	ILE	65	6.042	14.958	46.773	1.00	13.85
ATOM	501	CG1	ILE	65	6.822	16.488	44.929	1.00	14.20
ATOM	502	CD1	ILE	65	7.176	17.602	45.914	1.00	13.32
ATOM	503	C	ILE	65	8.382	13.359	46.551	1.00	12.47
ATOM	504	O	ILE	65	8.502	13.294	47.769	1.00	13.03
ATOM	505	N	ALA	66	8.252	12.279	45.786	1.00	12.41
ATOM	506	CA	ALA	66	8.217	10.933	46.356	1.00	9.78
ATOM	507	CB	ALA	66	7.938	9.913	45.252	1.00	9.59
ATOM	508	C	ALA	66	9.518	10.582	47.077	1.00	11.07
ATOM	509	O	ALA	66	9.529	9.899	48.103	1.00	11.14
ATOM	510	N	TYR	67	10.619	11.023	46.492	1.00	11.42
ATOM	511	CA	TYR	67	11.944	10.790	47.048	1.00	12.07
ATOM	512	CB	TYR	67	12.977	11.335	46.061	1.00	11.65
ATOM	513	CG	TYR	67	14.394	11.327	46.566	1.00	13.46
ATOM	514	CD1	TYR	67	15.120	10.146	46.641	1.00	13.65
ATOM	515	CE1	TYR	67	16.441	10.144	47.081	1.00	15.17
ATOM	516	CD2	TYR	67	15.018	12.515	46.949	1.00	16.34
ATOM	517	CE2	TYR	67	16.333	12.529	47.389	1.00	13.50
ATOM	518	CZ	TYR	67	17.039	11.340	47.451	1.00	16.29
ATOM	519	OH	TYR	67	18.351	11.348	47.874	1.00	16.32
ATOM	520	C	TYR	67	12.082	11.487	48.414	1.00	12.63
ATOM	521	O	TYR	67	12.501	10.878	49.406	1.00	12.25
ATOM	522	N	HIS	68	11.713	12.765	48.455	1.00	14.09
ATOM	523	CA	HIS	68	11.814	13.548	49.688	1.00	13.34
ATOM	524	CB	HIS	68	11.723	15.039	49.358	1.00	12.95
ATOM	525	CG	HIS	68	12.930	15.561	48.644	1.00	13.09
ATOM	526	CD2	HIS	68	13.146	15.833	47.335	1.00	13.59
ATOM	527	ND1	HIS	68	14.128	15.794	49.285	1.00	11.39
ATOM	528	CE1	HIS	68	15.030	16.185	48.403	1.00	13.50
ATOM	529	NE2	HIS	68	14.461	16.217	47.211	1.00	14.36
ATOM	530	C	HIS	68	10.771	13.147	50.722	1.00	14.18
ATOM	531	O	HIS	68	11.002	13.282	51.929	1.00	12.96
ATOM	532	N	THR	69	9.631	12.651	50.247	1.00	13.76
ATOM	533	CA	THR	69	8.572	12.193	51.125	1.00	12.86
ATOM	534	CB	THR	69	7.291	11.816	50.321	1.00	13.67
ATOM	535	OG1	THR	69	6.692	13.004	49.794	1.00	13.10
ATOM	536	CG2	THR	69	6.290	11.098	51.200	1.00	13.21
ATOM	537	C	THR	69	9.080	10.957	51.877	1.00	12.94
ATOM	538	O	THR	69	8.891	10.837	53.086	1.00	13.96
ATOM	539	N	ALA	70	9.736	10.045	51.166	1.00	12.91
ATOM	540	CA	ALA	70	10.266	8.840	51.795	1.00	12.85
ATOM	541	CB	ALA	70	10.905	7.924	50.743	1.00	16.07
ATOM	542	C	ALA	70	11.285	9.166	52.893	1.00	13.23
ATOM	543	O	ALA	70	11.278	8.543	53.959	1.00	12.96
ATOM	544	N	ALA	71	12.157	10.136	52.635	1.00	13.50
ATOM	545	CA	ALA	71	13.174	10.519	53.613	1.00	13.45
ATOM	546	CB	ALA	71	14.166	11.480	52.984	1.00	14.53
ATOM	547	C	ALA	71	12.539	11.153	54.845	1.00	14.10
ATOM	548	O	ALA	71	12.935	10.876	55.981	1.00	14.47
ATOM	549	N	VAL	72	11.542	11.999	54.622	1.00	14.55
ATOM	550	CA	VAL	72	10.861	12.654	55.736	1.00	15.46
ATOM	551	CB	VAL	72	9.830	13.682	55.227	1.00	16.14
ATOM	552	CG1	VAL	72	9.000	14.217	56.394	1.00	16.03
ATOM	553	CG2	VAL	72	10.540	14.808	54.509	1.00	16.34
ATOM	554	C	VAL	72	10.153	11.606	56.590	1.00	15.16
ATOM	555	O	VAL	72	10.183	11.668	57.824	1.00	14.69
ATOM	556	N	ARG	73	9.522	10.633	55.936	1.00	14.57
ATOM	557	CA	ARG	73	8.815	9.593	56.669	1.00	12.67
ATOM	558	CB	ARG	73	8.060	8.654	55.719	1.00	13.42
ATOM	559	CG	ARG	73	7.356	7.508	56.447	1.00	12.53
ATOM	560	CD	ARG	73	6.380	8.015	57.520	1.00	16.45
ATOM	561	NE	ARG	73	5.237	8.713	56.933	1.00	16.27
ATOM	562	CZ	ARG	73	4.358	9.437	57.617	1.00	17.72
ATOM	563	NH1	ARG	73	4.479	9.573	58.934	1.00	13.94
ATOM	564	NH2	ARG	73	3.353	10.027	56.982	1.00	16.25
ATOM	565	C	ARG	73	9.748	8.767	57.540	1.00	12.87
ATOM	566	O	ARG	73	9.369	8.343	58.631	1.00	13.64
ATOM	567	N	ARG	74	10.963	8.524	57.057	1.00	14.65

ATOM	568	CA	ARG	74	11.926	7.738	57.823	1.00	13.53
ATOM	569	CB	ARG	74	13.155	7.405	56.975	1.00	15.28
ATOM	570	CG	ARG	74	12.860	6.543	55.752	1.00	16.51
ATOM	571	CD	ARG	74	14.133	5.937	55.155	1.00	17.73
ATOM	572	NE	ARG	74	13.895	5.341	53.838	1.00	20.82
ATOM	573	CZ	ARG	74	13.896	6.020	52.694	1.00	22.35
ATOM	574	NH1	ARG	74	14.127	7.325	52.688	1.00	23.90
ATOM	575	NH2	ARG	74	13.656	5.397	51.552	1.00	27.63
ATOM	576	C	ARG	74	12.355	8.513	59.052	1.00	16.13
ATOM	577	O	ARG	74	12.673	7.932	60.093	1.00	16.86
ATOM	578	N	GLY	75	12.359	9.834	58.923	1.00	16.62
ATOM	579	CA	GLY	75	12.753	10.681	60.035	1.00	17.65
ATOM	580	C	GLY	75	11.629	10.935	61.019	1.00	17.81
ATOM	581	O	GLY	75	11.865	11.107	62.215	1.00	17.98
ATOM	582	N	ALA	76	10.398	10.952	60.525	1.00	17.56
ATOM	583	CA	ALA	76	9.240	11.210	61.385	1.00	17.19
ATOM	584	CB	ALA	76	8.767	12.640	61.173	1.00	16.95
ATOM	585	C	ALA	76	8.108	10.229	61.094	1.00	18.56
ATOM	586	O	ALA	76	7.100	10.590	60.492	1.00	18.58
ATOM	587	N	PRO	77	8.255	8.976	61.549	1.00	20.24
ATOM	588	CD	PRO	77	9.361	8.507	62.400	1.00	21.81
ATOM	589	CA	PRO	77	7.271	7.908	61.348	1.00	20.91
ATOM	590	CB	PRO	77	7.949	6.698	61.982	1.00	22.03
ATOM	591	CG	PRO	77	8.749	7.303	63.072	1.00	25.30
ATOM	592	C	PRO	77	5.870	8.138	61.902	1.00	20.81
ATOM	593	O	PRO	77	4.929	7.462	61.488	1.00	20.60
ATOM	594	N	ASN	78	5.720	9.080	62.828	1.00	19.26
ATOM	595	CA	ASN	78	4.402	9.342	63.399	1.00	20.69
ATOM	596	CB	ASN	78	4.449	9.242	64.932	1.00	22.75
ATOM	597	CG	ASN	78	4.554	7.806	65.414	1.00	27.00
ATOM	598	OD1	ASN	78	3.772	6.951	65.001	1.00	31.16
ATOM	599	ND2	ASN	78	5.515	7.534	66.287	1.00	29.98
ATOM	600	C	ASN	78	3.821	10.693	62.992	1.00	19.38
ATOM	601	O	ASN	78	2.750	11.076	63.456	1.00	21.43
ATOM	602	N	CYS	79	4.507	11.399	62.104	1.00	17.77
ATOM	603	CA	CYS	79	4.040	12.713	61.686	1.00	19.13
ATOM	604	CB	CYS	79	5.210	13.553	61.150	1.00	19.79
ATOM	605	SG	CYS	79	5.646	13.275	59.389	1.00	24.05
ATOM	606	C	CYS	79	2.938	12.667	60.633	1.00	19.96
ATOM	607	O	CYS	79	2.735	11.652	59.961	1.00	17.94
ATOM	608	N	LEU	80	2.202	13.770	60.528	1.00	19.53
ATOM	609	CA	LEU	80	1.163	13.904	59.519	1.00	19.26
ATOM	610	CB	LEU	80	0.054	14.860	59.978	1.00	20.96
ATOM	611	CG	LEU	80	-0.984	15.225	58.909	1.00	21.27
ATOM	612	CD1	LEU	80	-1.670	13.967	58.396	1.00	22.20
ATOM	613	CD2	LEU	80	-2.008	16.195	59.488	1.00	22.16
ATOM	614	C	LEU	80	1.962	14.527	58.387	1.00	18.90
ATOM	615	O	LEU	80	2.442	15.655	58.509	1.00	18.11
ATOM	616	N	LEU	81	2.120	13.788	57.294	1.00	15.94
ATOM	617	CA	LEU	81	2.924	14.261	56.181	1.00	16.28
ATOM	618	CB	LEU	81	3.930	13.169	55.775	1.00	18.46
ATOM	619	CG	LEU	81	5.213	13.532	55.008	1.00	18.26
ATOM	620	CD1	LEU	81	6.102	12.304	54.937	1.00	18.48
ATOM	621	CD2	LEU	81	4.884	14.038	53.605	1.00	21.41
ATOM	622	C	LEU	81	2.090	14.669	54.986	1.00	16.06
ATOM	623	O	LEU	81	1.357	13.857	54.417	1.00	16.48
ATOM	624	N	LEU	82	2.183	15.944	54.628	1.00	16.31
ATOM	625	CA	LEU	82	1.457	16.466	53.477	1.00	17.30
ATOM	626	CB	LEU	82	0.897	17.859	53.766	1.00	19.25
ATOM	627	CG	LEU	82	-0.451	17.985	54.495	1.00	22.19
ATOM	628	CD1	LEU	82	-0.449	17.200	55.792	1.00	21.32
ATOM	629	CD2	LEU	82	-0.720	19.462	54.750	1.00	21.16
ATOM	630	C	LEU	82	2.458	16.557	52.342	1.00	17.89
ATOM	631	O	LEU	82	3.560	17.068	52.531	1.00	18.88
ATOM	632	N	ALA	83	2.092	16.053	51.171	1.00	16.82
ATOM	633	CA	ALA	83	2.997	16.114	50.033	1.00	16.39
ATOM	634	CB	ALA	83	3.406	14.720	49.607	1.00	16.49
ATOM	635	C	ALA	83	2.337	16.841	48.881	1.00	14.35
ATOM	636	O	ALA	83	1.186	16.579	48.554	1.00	14.15
ATOM	637	N	ASP	84	3.058	17.775	48.274	1.00	13.95
ATOM	638	CA	ASP	84	2.498	18.505	47.148	1.00	16.00
ATOM	639	CB	ASP	84	3.268	19.799	46.893	1.00	22.80
ATOM	640	CG	ASP	84	2.767	20.957	47.723	1.00	24.54
ATOM	641	OD1	ASP	84	1.548	21.195	47.752	1.00	30.38
ATOM	642	OD2	ASP	84	3.602	21.644	48.329	1.00	32.60
ATOM	643	C	ASP	84	2.526	17.716	45.851	1.00	16.16
ATOM	644	O	ASP	84	3.400	16.875	45.640	1.00	14.13

ATOM	645	N	LEU	85	1.535	17.967	44.998	1.00	15.10
ATOM	646	CA	LEU	85	1.539	17.381	43.667	1.00	15.19
ATOM	647	CB	LEU	85	0.127	17.043	43.167	1.00	16.96
ATOM	648	CG	LEU	85	-0.451	15.751	43.751	1.00	17.98
ATOM	649	CD1	LEU	85	-1.753	15.360	43.028	1.00	17.36
ATOM	650	CD2	LEU	85	0.574	14.639	43.604	1.00	17.58
ATOM	651	C	LEU	85	2.111	18.593	42.937	1.00	14.95
ATOM	652	O	LEU	85	1.563	19.694	43.024	1.00	15.92
ATOM	653	N	PRO	86	3.255	18.419	42.262	1.00	14.05
ATOM	654	CD	PRO	86	3.984	17.143	42.170	1.00	15.98
ATOM	655	CA	PRO	86	3.949	19.473	41.518	1.00	15.84
ATOM	656	CB	PRO	86	5.306	18.839	41.224	1.00	16.60
ATOM	657	CG	PRO	86	4.933	17.386	41.018	1.00	16.94
ATOM	658	C	PRO	86	3.249	19.970	40.255	1.00	17.90
ATOM	659	O	PRO	86	2.161	19.515	39.899	1.00	17.49
ATOM	660	N	PHE	87	3.897	20.917	39.591	1.00	17.02
ATOM	661	CA	PHE	87	3.386	21.509	38.371	1.00	18.00
ATOM	662	CB	PHE	87	4.486	22.357	37.728	1.00	19.87
ATOM	663	CG	PHE	87	4.125	22.906	36.383	1.00	19.63
ATOM	664	CD1	PHE	87	3.025	23.739	36.229	1.00	19.99
ATOM	665	CD2	PHE	87	4.893	22.588	35.265	1.00	20.71
ATOM	666	CE1	PHE	87	2.692	24.249	34.982	1.00	21.55
ATOM	667	CE2	PHE	87	4.567	23.095	34.012	1.00	20.03
ATOM	668	CZ	PHE	87	3.466	23.926	33.870	1.00	21.84
ATOM	669	C	PHE	87	2.871	20.467	37.373	1.00	17.52
ATOM	670	O	PHE	87	3.561	19.495	37.051	1.00	16.53
ATOM	671	N	MET	88	1.644	20.682	36.909	1.00	16.65
ATOM	672	CA	MET	88	0.984	19.816	35.936	1.00	18.63
ATOM	673	CB	MET	88	1.666	19.944	34.575	1.00	20.77
ATOM	674	CG	MET	88	0.767	19.578	33.413	1.00	22.54
ATOM	675	SD	MET	88	-0.593	20.732	33.216	1.00	21.14
ATOM	676	CE	MET	88	0.111	21.920	32.099	1.00	22.91
ATOM	677	C	MET	88	0.931	18.340	36.326	1.00	19.33
ATOM	678	O	MET	88	0.987	17.463	35.461	1.00	22.28
ATOM	679	N	ALA	89	0.822	18.062	37.619	1.00	17.87
ATOM	680	CA	ALA	89	0.749	16.685	38.086	1.00	17.24
ATOM	681	CB	ALA	89	1.609	16.506	39.333	1.00	18.47
ATOM	682	C	ALA	89	-0.701	16.285	38.379	1.00	16.90
ATOM	683	O	ALA	89	-0.978	15.164	38.816	1.00	17.43
ATOM	684	N	TYR	90	-1.624	17.209	38.145	1.00	16.10
ATOM	685	CA	TYR	90	-3.041	16.942	38.364	1.00	15.59
ATOM	686	CB	TYR	90	-3.452	17.350	39.790	1.00	14.88
ATOM	687	CG	TYR	90	-2.959	18.715	40.223	1.00	15.60
ATOM	688	CD1	TYR	90	-3.753	19.854	40.064	1.00	17.89
ATOM	689	CE1	TYR	90	-3.288	21.117	40.454	1.00	17.95
ATOM	690	CD2	TYR	90	-1.690	18.870	40.782	1.00	17.54
ATOM	691	CE2	TYR	90	-1.217	20.122	41.173	1.00	17.49
ATOM	692	CZ	TYR	90	-2.016	21.235	41.008	1.00	18.23
ATOM	693	OH	TYR	90	-1.543	22.470	41.404	1.00	19.18
ATOM	694	C	TYR	90	-3.885	17.666	37.322	1.00	15.82
ATOM	695	O	TYR	90	-4.937	18.225	37.628	1.00	17.20
ATOM	696	N	ALA	91	-3.412	17.628	36.079	1.00	16.74
ATOM	697	CA	ALA	91	-4.085	18.272	34.959	1.00	17.95
ATOM	698	CB	ALA	91	-3.177	18.262	33.731	1.00	18.19
ATOM	699	C	ALA	91	-5.425	17.611	34.631	1.00	17.59
ATOM	700	O	ALA	91	-6.289	18.230	34.010	1.00	16.62
ATOM	701	N	THR	92	-5.580	16.347	35.015	1.00	16.91
ATOM	702	CA	THR	92	-6.838	15.619	34.811	1.00	15.64
ATOM	703	CB	THR	92	-6.821	14.689	33.566	1.00	17.31
ATOM	704	OG1	THR	92	-5.942	13.582	33.804	1.00	15.34
ATOM	705	CG2	THR	92	-6.369	15.438	32.322	1.00	15.98
ATOM	706	C	THR	92	-7.052	14.720	36.021	1.00	16.55
ATOM	707	O	THR	92	-6.097	14.366	36.711	1.00	17.07
ATOM	708	N	PRO	93	-8.310	14.339	36.299	1.00	16.42
ATOM	709	CD	PRO	93	-9.570	14.771	35.669	1.00	17.40
ATOM	710	CA	PRO	93	-8.568	13.470	37.447	1.00	15.13
ATOM	711	CB	PRO	93	-10.056	13.168	37.312	1.00	17.06
ATOM	712	CG	PRO	93	-10.589	14.464	36.750	1.00	16.77
ATOM	713	C	PRO	93	-7.696	12.210	37.411	1.00	16.09
ATOM	714	O	PRO	93	-7.028	11.879	38.396	1.00	13.79
ATOM	715	N	GLU	94	-7.689	11.517	36.273	1.00	16.39
ATOM	716	CA	GLU	94	-6.882	10.305	36.120	1.00	17.29
ATOM	717	CB	GLU	94	-6.948	9.791	34.680	1.00	20.57
ATOM	718	CG	GLU	94	-8.040	8.779	34.426	1.00	27.03
ATOM	719	CD	GLU	94	-7.968	8.209	33.024	1.00	30.80
ATOM	720	OE1	GLU	94	-6.908	7.660	32.659	1.00	34.96
ATOM	721	OE2	GLU	94	-8.965	8.309	32.285	1.00	36.52

ATOM	722	C	GLU	94	-5.418	10.492	36.497	1.00	17.89
ATOM	723	O	GLU	94	-4.846	9.658	37.194	1.00	16.77
ATOM	724	N	GLN	95	-4.806	11.573	36.029	1.00	15.83
ATOM	725	CA	GLN	95	-3.408	11.811	36.350	1.00	16.28
ATOM	726	CB	GLN	95	-2.845	12.932	35.491	1.00	18.34
ATOM	727	CG	GLN	95	-2.936	12.662	34.002	1.00	24.91
ATOM	728	CD	GLN	95	-2.424	13.826	33.189	1.00	29.82
ATOM	729	OE1	GLN	95	-1.215	14.043	33.081	1.00	31.53
ATOM	730	NE2	GLN	95	-3.347	14.606	32.632	1.00	31.62
ATOM	731	C	GLN	95	-3.232	12.144	37.817	1.00	13.83
ATOM	732	O	GLN	95	-2.245	11.743	38.422	1.00	14.18
ATOM	733	N	ALA	96	-4.173	12.888	38.393	1.00	12.99
ATOM	734	CA	ALA	96	-4.071	13.213	39.813	1.00	11.89
ATOM	735	CB	ALA	96	-5.229	14.113	40.243	1.00	10.87
ATOM	736	C	ALA	96	-4.090	11.911	40.611	1.00	12.60
ATOM	737	O	ALA	96	-3.311	11.746	41.549	1.00	11.80
ATOM	738	N	PHE	97	-4.970	10.979	40.236	1.00	12.82
ATOM	739	CA	PHE	97	-5.050	9.709	40.956	1.00	13.08
ATOM	740	CB	PHE	97	-6.072	8.741	40.332	1.00	13.33
ATOM	741	CG	PHE	97	-7.459	9.303	40.173	1.00	14.06
ATOM	742	CD1	PHE	97	-7.975	10.220	41.079	1.00	14.07
ATOM	743	CD2	PHE	97	-8.254	8.891	39.113	1.00	13.38
ATOM	744	CE1	PHE	97	-9.273	10.725	40.931	1.00	11.22
ATOM	745	CE2	PHE	97	-9.556	9.385	38.948	1.00	13.40
ATOM	746	CZ	PHE	97	-10.061	10.302	39.859	1.00	11.20
ATOM	747	C	PHE	97	-3.699	8.990	40.975	1.00	13.62
ATOM	748	O	PHE	97	-3.244	8.552	42.026	1.00	13.09
ATOM	749	N	GLU	98	-3.064	8.856	39.815	1.00	14.92
ATOM	750	CA	GLU	98	-1.786	8.154	39.768	1.00	16.75
ATOM	751	CB	GLU	98	-1.356	7.859	38.327	1.00	20.44
ATOM	752	CG	GLU	98	-0.045	7.064	38.268	1.00	28.53
ATOM	753	CD	GLU	98	-0.113	5.768	39.066	1.00	33.54
ATOM	754	OE1	GLU	98	-0.767	4.810	38.587	1.00	35.57
ATOM	755	OE2	GLU	98	0.472	5.706	40.187	1.00	34.76
ATOM	756	C	GLU	98	-0.660	8.888	40.480	1.00	14.28
ATOM	757	O	GLU	98	0.134	8.275	41.198	1.00	14.65
ATOM	758	N	ASN	99	-0.580	10.196	40.294	1.00	12.45
ATOM	759	CA	ASN	99	0.490	10.944	40.941	1.00	11.69
ATOM	760	CB	ASN	99	0.627	12.329	40.299	1.00	11.89
ATOM	761	CG	ASN	99	1.172	12.238	38.890	1.00	12.59
ATOM	762	OD1	ASN	99	2.019	11.384	38.609	1.00	13.02
ATOM	763	ND2	ASN	99	0.707	13.105	38.002	1.00	13.56
ATOM	764	C	ASN	99	0.286	11.026	42.451	1.00	13.55
ATOM	765	O	ASN	99	1.256	10.953	43.216	1.00	11.87
ATOM	766	N	ALA	100	-0.970	11.157	42.879	1.00	12.15
ATOM	767	CA	ALA	100	-1.284	11.189	44.306	1.00	14.14
ATOM	768	CB	ALA	100	-2.777	11.489	44.531	1.00	13.05
ATOM	769	C	ALA	100	-0.940	9.814	44.878	1.00	12.60
ATOM	770	O	ALA	100	-0.347	9.709	45.953	1.00	13.66
ATOM	771	N	ALA	101	-1.312	8.748	44.175	1.00	12.06
ATOM	772	CA	ALA	101	-0.999	7.412	44.679	1.00	10.87
ATOM	773	CB	ALA	101	-1.590	6.338	43.755	1.00	10.90
ATOM	774	C	ALA	101	0.517	7.204	44.853	1.00	10.31
ATOM	775	O	ALA	101	0.953	6.543	45.794	1.00	12.24
ATOM	776	N	THR	102	1.322	7.766	43.958	1.00	10.77
ATOM	777	CA	THR	102	2.781	7.606	44.046	1.00	10.62
ATOM	778	CB	THR	102	3.450	8.244	42.833	1.00	11.82
ATOM	779	OG1	THR	102	3.011	7.556	41.648	1.00	12.54
ATOM	780	CG2	THR	102	4.965	8.143	42.934	1.00	13.14
ATOM	781	C	THR	102	3.329	8.218	45.331	1.00	12.67
ATOM	782	O	THR	102	4.122	7.609	46.053	1.00	13.26
ATOM	783	N	VAL	103	2.872	9.430	45.608	1.00	13.06
ATOM	784	CA	VAL	103	3.275	10.178	46.786	1.00	17.15
ATOM	785	CB	VAL	103	2.771	11.622	46.644	1.00	20.15
ATOM	786	CG1	VAL	103	2.563	12.250	47.990	1.00	26.49
ATOM	787	CG2	VAL	103	3.758	12.408	45.807	1.00	21.10
ATOM	788	C	VAL	103	2.769	9.533	48.084	1.00	16.61
ATOM	789	O	VAL	103	3.477	9.519	49.097	1.00	14.86
ATOM	790	N	MET	104	1.554	8.989	48.048	1.00	13.98
ATOM	791	CA	MET	104	0.976	8.336	49.219	1.00	13.90
ATOM	792	CB	MET	104	-0.514	8.053	48.997	1.00	16.23
ATOM	793	CG	MET	104	-1.373	9.288	48.838	1.00	20.48
ATOM	794	SD	MET	104	-1.516	10.232	50.350	1.00	23.82
ATOM	795	CE	MET	104	-2.587	9.130	51.315	1.00	23.65
ATOM	796	C	MET	104	1.701	7.031	49.537	1.00	13.22
ATOM	797	O	MET	104	1.979	6.735	50.707	1.00	13.56
ATOM	798	N	ARG	105	2.008	6.242	48.508	1.00	13.42

ATOM	799	CA	ARG	105	2.711	4.989	48.743	1.00	11.59
ATOM	800	CB	ARG	105	2.817	4.152	47.453	1.00	14.28
ATOM	801	CG	ARG	105	1.492	3.637	46.914	1.00	15.18
ATOM	802	CD	ARG	105	1.673	2.542	45.848	1.00	15.37
ATOM	803	NE	ARG	105	0.436	2.355	45.086	1.00	18.07
ATOM	804	CZ	ARG	105	0.151	2.986	43.951	1.00	16.17
ATOM	805	NH1	ARG	105	1.021	3.837	43.420	1.00	14.58
ATOM	806	NH2	ARG	105	-1.030	2.802	43.376	1.00	16.92
ATOM	807	C	ARG	105	4.112	5.296	49.275	1.00	10.65
ATOM	808	O	ARG	105	4.684	4.494	50.009	1.00	12.75
ATOM	809	N	ALA	106	4.645	6.463	48.916	1.00	12.09
ATOM	810	CA	ALA	106	5.978	6.873	49.346	1.00	13.06
ATOM	811	CB	ALA	106	6.496	7.999	48.455	1.00	14.76
ATOM	812	C	ALA	106	6.015	7.305	50.807	1.00	15.39
ATOM	813	O	ALA	106	7.094	7.529	51.365	1.00	15.17
ATOM	814	N	GLY	107	4.841	7.430	51.420	1.00	14.50
ATOM	815	CA	GLY	107	4.779	7.806	52.821	1.00	14.87
ATOM	816	C	GLY	107	3.904	8.991	53.207	1.00	15.59
ATOM	817	O	GLY	107	3.751	9.273	54.393	1.00	16.79
ATOM	818	N	ALA	108	3.331	9.691	52.238	1.00	13.12
ATOM	819	CA	ALA	108	2.484	10.833	52.569	1.00	13.97
ATOM	820	CB	ALA	108	2.307	11.724	51.342	1.00	14.04
ATOM	821	C	ALA	108	1.122	10.374	53.099	1.00	14.46
ATOM	822	O	ALA	108	0.696	9.251	52.834	1.00	14.12
ATOM	823	N	ASN	109	0.461	11.230	53.880	1.00	14.94
ATOM	824	CA	ASN	109	-0.863	10.919	54.440	1.00	14.90
ATOM	825	CB	ASN	109	-0.947	11.277	55.931	1.00	14.17
ATOM	826	CG	ASN	109	0.012	10.493	56.790	1.00	14.97
ATOM	827	OD1	ASN	109	-0.101	9.276	56.926	1.00	16.84
ATOM	828	ND2	ASN	109	0.959	11.193	57.388	1.00	14.33
ATOM	829	C	ASN	109	-1.901	11.781	53.737	1.00	13.58
ATOM	830	O	ASN	109	-3.102	11.556	53.870	1.00	15.82
ATOM	831	N	MET	110	-1.427	12.768	52.991	1.00	13.54
ATOM	832	CA	MET	110	-2.316	13.704	52.332	1.00	14.31
ATOM	833	CB	MET	110	-2.828	14.688	53.394	1.00	14.27
ATOM	834	CG	MET	110	-3.595	15.902	52.910	1.00	19.21
ATOM	835	SD	MET	110	-4.143	16.871	54.371	1.00	20.75
ATOM	836	CE	MET	110	-5.845	16.364	54.495	1.00	18.93
ATOM	837	C	MET	110	-1.576	14.431	51.219	1.00	13.50
ATOM	838	O	MET	110	-0.358	14.635	51.285	1.00	14.01
ATOM	839	N	VAL	111	-2.323	14.810	50.191	1.00	13.28
ATOM	840	CA	VAL	111	-1.765	15.507	49.050	1.00	15.44
ATOM	841	CB	VAL	111	-2.175	14.786	47.752	1.00	18.91
ATOM	842	CG1	VAL	111	-1.800	15.614	46.564	1.00	21.41
ATOM	843	CG2	VAL	111	-1.504	13.416	47.691	1.00	16.70
ATOM	844	C	VAL	111	-2.271	16.944	49.000	1.00	15.84
ATOM	845	O	VAL	111	-3.420	17.209	49.344	1.00	16.27
ATOM	846	N	LYS	112	-1.411	17.869	48.586	1.00	18.00
ATOM	847	CA	LYS	112	-1.810	19.266	48.475	1.00	17.62
ATOM	848	CB	LYS	112	-0.912	20.174	49.324	1.00	16.94
ATOM	849	CG	LYS	112	-1.299	21.650	49.203	1.00	18.28
ATOM	850	CD	LYS	112	-0.768	22.491	50.354	1.00	20.19
ATOM	851	CE	LYS	112	0.738	22.675	50.288	1.00	21.39
ATOM	852	NZ	LYS	112	1.171	23.485	49.116	1.00	22.77
ATOM	853	C	LYS	112	-1.738	19.707	47.022	1.00	18.52
ATOM	854	O	LYS	112	-0.741	19.461	46.330	1.00	18.26
ATOM	855	N	ILE	113	-2.800	20.360	46.563	1.00	18.70
ATOM	856	CA	ILE	113	-2.878	20.836	45.187	1.00	19.67
ATOM	857	CB	ILE	113	-3.852	19.967	44.359	1.00	20.73
ATOM	858	CG2	ILE	113	-3.270	18.573	44.169	1.00	20.69
ATOM	859	CG1	ILE	113	-5.201	19.870	45.067	1.00	21.18
ATOM	860	CD1	ILE	113	-6.238	19.041	44.316	1.00	22.35
ATOM	861	C	ILE	113	-3.349	22.288	45.139	1.00	20.68
ATOM	862	O	ILE	113	-4.206	22.694	45.919	1.00	23.09
ATOM	863	N	GLU	114	-2.775	23.055	44.217	1.00	20.92
ATOM	864	CA	GLU	114	-3.094	24.468	44.041	1.00	22.18
ATOM	865	CB	GLU	114	-1.872	25.219	43.510	1.00	23.81
ATOM	866	CG	GLU	114	-0.715	25.328	44.478	1.00	25.94
ATOM	867	CD	GLU	114	0.474	26.052	43.872	1.00	27.17
ATOM	868	OE1	GLU	114	0.296	26.741	42.844	1.00	28.77
ATOM	869	OE2	GLU	114	1.588	25.947	44.427	1.00	29.32
ATOM	870	C	GLU	114	-4.247	24.707	43.074	1.00	23.10
ATOM	871	O	GLU	114	-4.325	24.072	42.025	1.00	22.98
ATOM	872	N	GLY	115	-5.135	25.636	43.420	1.00	22.55
ATOM	873	CA	GLY	115	-6.246	25.933	42.534	1.00	24.88
ATOM	874	C	GLY	115	-7.581	26.079	43.230	1.00	24.82
ATOM	875	O	GLY	115	-7.720	25.743	44.406	1.00	26.26

ATOM	876	N	GLY	116	-8.569	26.582	42.496	1.00	25.06
ATOM	877	CA	GLY	116	-9.889	26.767	43.066	1.00	25.41
ATOM	878	C	GLY	116	-10.964	25.864	42.490	1.00	26.85
ATOM	879	O	GLY	116	-10.767	24.659	42.346	1.00	26.53
ATOM	880	N	GLU	117	-12.105	26.468	42.166	1.00	26.32
ATOM	881	CA	GLU	117	-13.268	25.782	41.606	1.00	27.23
ATOM	882	CB	GLU	117	-14.205	26.810	40.959	1.00	31.55
ATOM	883	CG	GLU	117	-15.191	27.444	41.923	1.00	36.76
ATOM	884	CD	GLU	117	-16.448	26.615	42.091	1.00	40.05
ATOM	885	OE1	GLU	117	-16.341	25.369	42.112	1.00	39.80
ATOM	886	OE2	GLU	117	-17.543	27.210	42.211	1.00	41.02
ATOM	887	C	GLU	117	-13.021	24.661	40.602	1.00	24.91
ATOM	888	O	GLU	117	-13.621	23.592	40.715	1.00	24.23
ATOM	889	N	TRP	118	-12.155	24.904	39.622	1.00	23.95
ATOM	890	CA	TRP	118	-11.880	23.906	38.588	1.00	23.05
ATOM	891	CB	TRP	118	-10.853	24.437	37.574	1.00	22.93
ATOM	892	CG	TRP	118	-9.417	24.433	38.027	1.00	22.06
ATOM	893	CD2	TRP	118	-8.430	23.432	37.736	1.00	22.29
ATOM	894	CE2	TRP	118	-7.227	23.836	38.356	1.00	21.75
ATOM	895	CE3	TRP	118	-8.449	22.231	37.015	1.00	21.59
ATOM	896	CD1	TRP	118	-8.787	25.377	38.790	1.00	22.77
ATOM	897	NE1	TRP	118	-7.472	25.027	38.989	1.00	23.97
ATOM	898	CZ2	TRP	118	-6.049	23.082	38.272	1.00	21.19
ATOM	899	CZ3	TRP	118	-7.273	21.478	36.932	1.00	19.76
ATOM	900	CH2	TRP	118	-6.093	21.908	37.558	1.00	18.03
ATOM	901	C	TRP	118	-11.415	22.562	39.137	1.00	22.73
ATOM	902	O	TRP	118	-11.504	21.542	38.453	1.00	22.61
ATOM	903	N	LEU	119	-10.933	22.563	40.375	1.00	22.53
ATOM	904	CA	LEU	119	-10.445	21.343	41.017	1.00	21.12
ATOM	905	CB	LEU	119	-9.323	21.686	42.000	1.00	22.00
ATOM	906	CG	LEU	119	-7.951	21.956	41.397	1.00	22.79
ATOM	907	CD1	LEU	119	-6.976	22.370	42.489	1.00	23.33
ATOM	908	CD2	LEU	119	-7.469	20.690	40.691	1.00	24.30
ATOM	909	C	LEU	119	-11.502	20.541	41.759	1.00	20.72
ATOM	910	O	LEU	119	-11.232	19.422	42.193	1.00	21.92
ATOM	911	N	VAL	120	-12.699	21.101	41.908	1.00	19.20
ATOM	912	CA	VAL	120	-13.766	20.419	42.638	1.00	19.95
ATOM	913	CB	VAL	120	-15.127	21.122	42.429	1.00	22.03
ATOM	914	CG1	VAL	120	-16.258	20.225	42.907	1.00	24.11
ATOM	915	CG2	VAL	120	-15.150	22.429	43.201	1.00	25.29
ATOM	916	C	VAL	120	-13.921	18.940	42.301	1.00	18.47
ATOM	917	O	VAL	120	-13.961	18.093	43.196	1.00	16.89
ATOM	918	N	GLU	121	-14.004	18.624	41.015	1.00	17.81
ATOM	919	CA	GLU	121	-14.163	17.237	40.611	1.00	17.82
ATOM	920	CB	GLU	121	-14.344	17.150	39.094	1.00	21.67
ATOM	921	CG	GLU	121	-14.418	15.728	38.576	1.00	25.89
ATOM	922	CD	GLU	121	-14.824	15.658	37.114	1.00	31.46
ATOM	923	OE1	GLU	121	-14.246	16.399	36.290	1.00	33.28
ATOM	924	OE2	GLU	121	-15.717	14.848	36.793	1.00	33.12
ATOM	925	C	GLU	121	-12.977	16.385	41.057	1.00	16.63
ATOM	926	O	GLU	121	-13.153	15.288	41.592	1.00	15.69
ATOM	927	N	THR	122	-11.772	16.901	40.846	1.00	16.55
ATOM	928	CA	THR	122	-10.557	16.188	41.230	1.00	15.50
ATOM	929	CB	THR	122	-9.291	17.010	40.858	1.00	16.20
ATOM	930	OG1	THR	122	-9.292	17.251	39.447	1.00	18.56
ATOM	931	CG2	THR	122	-8.009	16.250	41.215	1.00	15.78
ATOM	932	C	THR	122	-10.571	15.891	42.729	1.00	15.85
ATOM	933	O	THR	122	-10.300	14.769	43.145	1.00	14.26
ATOM	934	N	VAL	123	-10.905	16.890	43.539	1.00	16.07
ATOM	935	CA	VAL	123	-10.942	16.691	44.982	1.00	15.30
ATOM	936	CB	VAL	123	-11.265	17.993	45.722	1.00	16.32
ATOM	937	CG1	VAL	123	-11.382	17.733	47.217	1.00	15.84
ATOM	938	CG2	VAL	123	-10.194	19.023	45.431	1.00	17.06
ATOM	939	C	VAL	123	-11.964	15.649	45.392	1.00	16.79
ATOM	940	O	VAL	123	-11.685	14.793	46.237	1.00	13.71
ATOM	941	N	GLN	124	-13.155	15.728	44.803	1.00	15.90
ATOM	942	CA	GLN	124	-14.227	14.790	45.122	1.00	17.82
ATOM	943	CB	GLN	124	-15.498	15.146	44.333	1.00	19.74
ATOM	944	CG	GLN	124	-16.018	16.566	44.586	1.00	27.73
ATOM	945	CD	GLN	124	-17.335	16.871	43.871	1.00	30.08
ATOM	946	OE1	GLN	124	-17.414	16.825	42.641	1.00	33.03
ATOM	947	NE2	GLN	124	-18.370	17.190	44.643	1.00	28.31
ATOM	948	C	GLN	124	-13.820	13.350	44.815	1.00	18.29
ATOM	949	O	GLN	124	-14.045	12.439	45.621	1.00	17.54
ATOM	950	N	MET	125	-13.218	13.151	43.648	1.00	16.58
ATOM	951	CA	MET	125	-12.798	11.820	43.239	1.00	17.11
ATOM	952	CB	MET	125	-12.553	11.792	41.725	1.00	17.13

ATOM	953	CG	MET	125	-13.843	12.007	40.930	1.00	20.76
ATOM	954	SD	MET	125	-13.598	12.024	39.156	1.00	21.82
ATOM	955	CE	MET	125	-13.472	10.274	38.825	1.00	24.59
ATOM	956	C	MET	125	-11.578	11.317	44.011	1.00	15.45
ATOM	957	O	MET	125	-11.513	10.143	44.357	1.00	15.81
ATOM	958	N	LEU	126	-10.618	12.192	44.283	1.00	15.52
ATOM	959	CA	LEU	126	-9.458	11.776	45.047	1.00	16.42
ATOM	960	CB	LEU	126	-8.486	12.941	45.215	1.00	15.46
ATOM	961	CG	LEU	126	-7.491	13.096	44.056	1.00	16.54
ATOM	962	CD1	LEU	126	-6.769	14.429	44.166	1.00	17.29
ATOM	963	CD2	LEU	126	-6.498	11.933	44.087	1.00	16.74
ATOM	964	C	LEU	126	-9.914	11.264	46.416	1.00	17.65
ATOM	965	O	LEU	126	-9.459	10.217	46.882	1.00	15.07
ATOM	966	N	THR	127	-10.831	12.001	47.043	1.00	18.88
ATOM	967	CA	THR	127	-11.370	11.648	48.357	1.00	22.38
ATOM	968	CB	THR	127	-12.489	12.630	48.788	1.00	24.31
ATOM	969	OG1	THR	127	-11.971	13.967	48.825	1.00	30.18
ATOM	970	CG2	THR	127	-13.018	12.265	50.167	1.00	28.58
ATOM	971	C	THR	127	-11.950	10.235	48.406	1.00	21.91
ATOM	972	O	THR	127	-11.594	9.439	49.279	1.00	20.97
ATOM	973	N	GLU	128	-12.854	9.920	47.482	1.00	23.67
ATOM	974	CA	GLU	128	-13.455	8.589	47.473	1.00	22.51
ATOM	975	CB	GLU	128	-14.643	8.532	46.499	1.00	26.49
ATOM	976	CG	GLU	128	-14.656	9.613	45.450	1.00	27.76
ATOM	977	CD	GLU	128	-15.846	9.512	44.501	1.00	26.90
ATOM	978	OE1	GLU	128	-17.002	9.469	44.969	1.00	26.96
ATOM	979	OE2	GLU	128	-15.625	9.488	43.281	1.00	26.94
ATOM	980	C	GLU	128	-12.435	7.505	47.140	1.00	22.91
ATOM	981	O	GLU	128	-12.641	6.333	47.458	1.00	22.08
ATOM	982	N	ARG	129	-11.324	7.895	46.520	1.00	19.89
ATOM	983	CA	ARG	129	-10.291	6.929	46.176	1.00	19.15
ATOM	984	CB	ARG	129	-9.713	7.256	44.792	1.00	18.25
ATOM	985	CG	ARG	129	-10.712	6.934	43.664	1.00	18.33
ATOM	986	CD	ARG	129	-10.483	7.728	42.382	1.00	16.74
ATOM	987	NE	ARG	129	-11.514	7.426	41.386	1.00	14.27
ATOM	988	CZ	ARG	129	-12.793	7.779	41.491	1.00	16.92
ATOM	989	NH1	ARG	129	-13.220	8.459	42.547	1.00	14.64
ATOM	990	NH2	ARG	129	-13.654	7.440	40.544	1.00	15.04
ATOM	991	C	ARG	129	-9.202	6.856	47.260	1.00	19.41
ATOM	992	O	ARG	129	-8.045	6.521	46.987	1.00	18.30
ATOM	993	N	ALA	130	-9.616	7.174	48.488	1.00	19.07
ATOM	994	CA	ALA	130	-8.789	7.129	49.697	1.00	17.95
ATOM	995	CB	ALA	130	-8.201	5.722	49.868	1.00	16.84
ATOM	996	C	ALA	130	-7.674	8.164	49.860	1.00	18.35
ATOM	997	O	ALA	130	-6.821	8.015	50.738	1.00	17.72
ATOM	998	N	VAL	131	-7.684	9.211	49.043	1.00	18.16
ATOM	999	CA	VAL	131	-6.656	10.236	49.123	1.00	18.21
ATOM	1000	CB	VAL	131	-6.059	10.538	47.733	1.00	18.83
ATOM	1001	CG1	VAL	131	-4.972	11.599	47.856	1.00	19.02
ATOM	1002	CG2	VAL	131	-5.502	9.264	47.124	1.00	18.78
ATOM	1003	C	VAL	131	-7.162	11.550	49.704	1.00	17.21
ATOM	1004	O	VAL	131	-7.921	12.274	49.059	1.00	17.48
ATOM	1005	N	PRO	132	-6.768	11.858	50.947	1.00	17.96
ATOM	1006	CD	PRO	132	-6.078	10.981	51.909	1.00	16.97
ATOM	1007	CA	PRO	132	-7.195	13.109	51.580	1.00	16.82
ATOM	1008	CB	PRO	132	-6.775	12.929	53.043	1.00	17.66
ATOM	1009	CG	PRO	132	-5.667	11.944	52.979	1.00	22.79
ATOM	1010	C	PRO	132	-6.495	14.270	50.880	1.00	16.36
ATOM	1011	O	PRO	132	-5.335	14.159	50.465	1.00	14.89
ATOM	1012	N	VAL	133	-7.207	15.381	50.745	1.00	15.39
ATOM	1013	CA	VAL	133	-6.666	16.534	50.046	1.00	14.12
ATOM	1014	CB	VAL	133	-7.488	16.816	48.772	1.00	14.52
ATOM	1015	CG1	VAL	133	-6.921	18.016	48.037	1.00	12.24
ATOM	1016	CG2	VAL	133	-7.495	15.576	47.874	1.00	13.02
ATOM	1017	C	VAL	133	-6.621	17.821	50.855	1.00	14.73
ATOM	1018	O	VAL	133	-7.526	18.116	51.632	1.00	14.95
ATOM	1019	N	CYS	134	-5.546	18.571	50.650	1.00	15.49
ATOM	1020	CA	CYS	134	-5.355	19.868	51.273	1.00	14.56
ATOM	1021	CB	CYS	134	-4.001	19.946	51.985	1.00	14.83
ATOM	1022	SG	CYS	134	-3.649	21.586	52.681	1.00	17.18
ATOM	1023	C	CYS	134	-5.388	20.866	50.121	1.00	16.54
ATOM	1024	O	CYS	134	-4.642	20.734	49.143	1.00	16.64
ATOM	1025	N	GLY	135	-6.276	21.851	50.215	1.00	16.38
ATOM	1026	CA	GLY	135	-6.371	22.864	49.176	1.00	16.44
ATOM	1027	C	GLY	135	-5.297	23.919	49.363	1.00	18.40
ATOM	1028	O	GLY	135	-4.615	23.932	50.387	1.00	17.99
ATOM	1029	N	HIS	136	-5.150	24.806	48.382	1.00	18.50

ATOM	1030	CA	HIS	136	-4.147	25.868	48.435	1.00	18.97
ATOM	1031	C	HIS	136	-4.624	27.055	47.603	1.00	21.58
ATOM	1032	O	HIS	136	-4.727	26.965	46.380	1.00	21.19
ATOM	1033	CB	HIS	136	-2.810	25.332	47.899	1.00	19.18
ATOM	1034	CG	HIS	136	-1.638	26.240	48.126	1.00	19.85
ATOM	1035	ND1	HIS	136	-0.349	25.774	48.029	1.00	21.61
ATOM	1036	CE1	HIS	136	0.428	26.819	48.243	1.00	22.89
ATOM	1037	CD2	HIS	136	-1.614	27.568	48.403	1.00	19.60
ATOM	1038	NE2	HIS	136	-0.291	27.929	48.474	1.00	20.06
ATOM	1039	N	LEU	137	-4.925	28.162	48.278	1.00	23.56
ATOM	1040	CA	LEU	137	-5.399	29.374	47.617	1.00	24.34
ATOM	1041	CB	LEU	137	-6.850	29.655	48.019	1.00	25.33
ATOM	1042	CG	LEU	137	-7.884	28.574	47.685	1.00	24.22
ATOM	1043	CD1	LEU	137	-9.203	28.871	48.386	1.00	24.72
ATOM	1044	CD2	LEU	137	-8.072	28.510	46.181	1.00	24.79
ATOM	1045	C	LEU	137	-4.528	30.578	47.979	1.00	26.25
ATOM	1046	O	LEU	137	-3.798	30.552	48.969	1.00	25.52
ATOM	1047	N	GLY	138	-4.617	31.630	47.169	1.00	28.18
ATOM	1048	CA	GLY	138	-3.837	32.827	47.411	1.00	30.33
ATOM	1049	C	GLY	138	-2.702	32.926	46.414	1.00	32.93
ATOM	1050	O	GLY	138	-2.919	32.829	45.208	1.00	33.34
ATOM	1051	N	LEU	139	-1.489	33.109	46.916	1.00	34.19
ATOM	1052	CA	LEU	139	-0.320	33.212	46.058	1.00	36.17
ATOM	1053	CB	LEU	139	0.784	33.982	46.787	1.00	37.11
ATOM	1054	CG	LEU	139	1.968	34.522	45.977	1.00	39.03
ATOM	1055	CD1	LEU	139	2.838	35.383	46.884	1.00	40.33
ATOM	1056	CD2	LEU	139	2.780	33.385	45.383	1.00	37.65
ATOM	1057	C	LEU	139	0.157	31.803	45.698	1.00	37.33
ATOM	1058	O	LEU	139	0.914	31.184	46.442	1.00	37.46
ATOM	1059	N	THR	140	-0.304	31.303	44.555	1.00	37.52
ATOM	1060	CA	THR	140	0.064	29.974	44.081	1.00	38.56
ATOM	1061	CB	THR	140	-1.057	29.367	43.214	1.00	39.12
ATOM	1062	OG1	THR	140	-1.375	30.266	42.145	1.00	38.58
ATOM	1063	CG2	THR	140	-2.302	29.118	44.053	1.00	38.94
ATOM	1064	C	THR	140	1.343	30.044	43.249	1.00	38.97
ATOM	1065	O	THR	140	1.314	30.444	42.085	1.00	39.39
ATOM	1066	N	PRO	141	2.483	29.646	43.837	1.00	38.90
ATOM	1067	CD	PRO	141	2.619	29.077	45.190	1.00	39.41
ATOM	1068	CA	PRO	141	3.778	29.669	43.147	1.00	37.89
ATOM	1069	CB	PRO	141	4.742	29.115	44.197	1.00	38.82
ATOM	1070	CG	PRO	141	3.864	28.250	45.055	1.00	40.43
ATOM	1071	C	PRO	141	3.831	28.899	41.831	1.00	37.49
ATOM	1072	O	PRO	141	4.622	29.233	40.947	1.00	34.97
ATOM	1073	N	GLN	142	2.997	27.872	41.700	1.00	35.93
ATOM	1074	CA	GLN	142	2.975	27.084	40.470	1.00	37.63
ATOM	1075	CB	GLN	142	2.072	25.855	40.635	1.00	35.67
ATOM	1076	CG	GLN	142	2.807	24.600	41.091	1.00	34.13
ATOM	1077	CD	GLN	142	1.860	23.471	41.458	1.00	33.64
ATOM	1078	OE1	GLN	142	0.906	23.186	40.737	1.00	31.98
ATOM	1079	NE2	GLN	142	2.127	22.817	42.583	1.00	33.66
ATOM	1080	C	GLN	142	2.508	27.920	39.282	1.00	38.52
ATOM	1081	O	GLN	142	2.859	27.635	38.134	1.00	38.49
ATOM	1082	N	SER	143	1.718	28.953	39.562	1.00	39.73
ATOM	1083	CA	SER	143	1.210	29.834	38.513	1.00	40.92
ATOM	1084	CB	SER	143	-0.279	30.123	38.732	1.00	40.43
ATOM	1085	OG	SER	143	-1.059	28.946	38.606	1.00	41.04
ATOM	1086	C	SER	143	1.982	31.149	38.484	1.00	41.64
ATOM	1087	O	SER	143	1.448	32.178	38.076	1.00	42.46
ATOM	1088	N	VAL	144	3.238	31.110	38.916	1.00	42.62
ATOM	1089	CA	VAL	144	4.075	32.306	38.935	1.00	43.78
ATOM	1090	CB	VAL	144	5.483	31.995	39.492	1.00	43.30
ATOM	1091	CG1	VAL	144	6.194	31.001	38.588	1.00	43.74
ATOM	1092	CG2	VAL	144	6.291	33.278	39.616	1.00	44.06
ATOM	1093	C	VAL	144	4.219	32.918	37.541	1.00	44.58
ATOM	1094	O	VAL	144	4.423	34.123	37.405	1.00	44.39
ATOM	1095	N	ASN	145	4.111	32.082	36.512	1.00	45.34
ATOM	1096	CA	ASN	145	4.231	32.540	35.130	1.00	47.01
ATOM	1097	CB	ASN	145	4.606	31.368	34.214	1.00	47.34
ATOM	1098	CG	ASN	145	5.992	30.821	34.505	1.00	48.01
ATOM	1099	OD1	ASN	145	7.000	31.488	34.264	1.00	47.54
ATOM	1100	ND2	ASN	145	6.049	29.602	35.031	1.00	48.81
ATOM	1101	C	ASN	145	2.938	33.179	34.640	1.00	47.35
ATOM	1102	O	ASN	145	2.905	33.813	33.585	1.00	47.69
ATOM	1103	N	ILE	146	1.872	33.005	35.410	1.00	48.31
ATOM	1104	CA	ILE	146	0.578	33.569	35.055	1.00	49.69
ATOM	1105	CB	ILE	146	-0.574	32.693	35.589	1.00	49.13
ATOM	1106	CG2	ILE	146	-1.912	33.335	35.263	1.00	48.60

ATOM	1107	CG1	ILE	146	-0.485	31.290	34.981	1.00	48.60
ATOM	1108	CD1	ILE	146	-0.628	31.262	33.472	1.00	48.16
ATOM	1109	C	ILE	146	0.426	34.976	35.623	1.00	51.32
ATOM	1110	O	ILE	146	-0.045	35.880	34.934	1.00	51.26
ATOM	1111	N	PHE	147	0.831	35.154	36.879	1.00	52.78
ATOM	1112	CA	PHE	147	0.738	36.448	37.553	1.00	54.17
ATOM	1113	CB	PHE	147	0.713	36.254	39.072	1.00	55.12
ATOM	1114	CG	PHE	147	-0.198	35.152	39.528	1.00	56.36
ATOM	1115	CD1	PHE	147	-1.553	35.177	39.218	1.00	57.26
ATOM	1116	CD2	PHE	147	0.303	34.084	40.266	1.00	57.27
ATOM	1117	CE1	PHE	147	-2.400	34.151	39.634	1.00	57.90
ATOM	1118	CE2	PHE	147	-0.533	33.052	40.688	1.00	57.81
ATOM	1119	CZ	PHE	147	-1.887	33.086	40.371	1.00	58.12
ATOM	1120	C	PHE	147	1.914	37.350	37.188	1.00	54.46
ATOM	1121	O	PHE	147	1.937	38.528	37.544	1.00	54.14
ATOM	1122	N	GLY	148	2.890	36.787	36.483	1.00	55.28
ATOM	1123	CA	GLY	148	4.056	37.555	36.090	1.00	56.16
ATOM	1124	C	GLY	148	4.972	37.817	37.268	1.00	56.63
ATOM	1125	O	GLY	148	5.699	38.809	37.294	1.00	56.49
ATOM	1126	N	GLY	149	4.933	36.920	38.249	1.00	57.50
ATOM	1127	CA	GLY	149	5.761	37.068	39.431	1.00	58.67
ATOM	1128	C	GLY	149	4.997	36.690	40.685	1.00	59.94
ATOM	1129	O	GLY	149	3.828	36.305	40.613	1.00	59.46
ATOM	1130	N	TYR	150	5.653	36.797	41.837	1.00	61.00
ATOM	1131	CA	TYR	150	5.018	36.467	43.108	1.00	62.09
ATOM	1132	CB	TYR	150	6.029	35.830	44.068	1.00	62.64
ATOM	1133	CG	TYR	150	6.779	34.653	43.484	1.00	63.79
ATOM	1134	CD1	TYR	150	7.910	34.846	42.688	1.00	64.15
ATOM	1135	CE1	TYR	150	8.601	33.764	42.142	1.00	64.08
ATOM	1136	CD2	TYR	150	6.355	33.344	43.718	1.00	64.03
ATOM	1137	CE2	TYR	150	7.038	32.256	43.175	1.00	63.87
ATOM	1138	CZ	TYR	150	8.160	32.474	42.389	1.00	64.27
ATOM	1139	OH	TYR	150	8.840	31.407	41.849	1.00	64.43
ATOM	1140	C	TYR	150	4.426	37.721	43.744	1.00	62.40
ATOM	1141	O	TYR	150	5.141	38.523	44.347	1.00	62.18
ATOM	1142	N	LYS	151	3.113	37.883	43.603	1.00	62.64
ATOM	1143	CA	LYS	151	2.414	39.038	44.152	1.00	62.63
ATOM	1144	CB	LYS	151	1.768	39.842	43.020	1.00	63.52
ATOM	1145	CG	LYS	151	2.765	40.359	41.993	1.00	64.61
ATOM	1146	CD	LYS	151	2.085	41.186	40.916	1.00	65.48
ATOM	1147	CE	LYS	151	3.100	41.731	39.921	1.00	66.46
ATOM	1148	NZ	LYS	151	2.464	42.586	38.878	1.00	66.97
ATOM	1149	C	LYS	151	1.351	38.615	45.161	1.00	62.18
ATOM	1150	O	LYS	151	1.022	37.433	45.273	1.00	62.06
ATOM	1151	N	VAL	152	0.815	39.586	45.893	1.00	61.53
ATOM	1152	CA	VAL	152	-0.204	39.309	46.897	1.00	60.97
ATOM	1153	CB	VAL	152	-0.190	40.378	48.010	1.00	60.76
ATOM	1154	CG1	VAL	152	-1.225	40.039	49.073	1.00	60.74
ATOM	1155	CG2	VAL	152	1.195	40.468	48.624	1.00	60.69
ATOM	1156	C	VAL	152	-1.601	39.263	46.293	1.00	60.64
ATOM	1157	O	VAL	152	-1.999	40.166	45.559	1.00	60.43
ATOM	1158	N	GLN	153	-2.341	38.205	46.608	1.00	60.42
ATOM	1159	CA	GLN	153	-3.703	38.042	46.111	1.00	60.14
ATOM	1160	CB	GLN	153	-3.918	36.620	45.581	1.00	60.93
ATOM	1161	CG	GLN	153	-3.467	36.402	44.140	1.00	61.33
ATOM	1162	CD	GLN	153	-1.977	36.593	43.953	1.00	61.41
ATOM	1163	OE1	GLN	153	-1.169	35.901	44.572	1.00	62.43
ATOM	1164	NE2	GLN	153	-1.605	37.531	43.091	1.00	60.96
ATOM	1165	C	GLN	153	-4.715	38.333	47.214	1.00	59.42
ATOM	1166	O	GLN	153	-4.350	38.483	48.379	1.00	59.06
ATOM	1167	N	GLY	154	-5.988	38.410	46.838	1.00	58.76
ATOM	1168	CA	GLY	154	-7.030	38.685	47.808	1.00	58.28
ATOM	1169	C	GLY	154	-7.425	40.149	47.825	1.00	57.80
ATOM	1170	O	GLY	154	-8.548	40.489	48.199	1.00	56.85
ATOM	1171	N	ARG	155	-6.497	41.013	47.421	1.00	58.06
ATOM	1172	CA	ARG	155	-6.732	42.455	47.380	1.00	58.09
ATOM	1173	CB	ARG	155	-5.535	43.174	46.742	1.00	59.37
ATOM	1174	CG	ARG	155	-4.204	42.996	47.470	1.00	60.93
ATOM	1175	CD	ARG	155	-4.242	43.586	48.873	1.00	62.00
ATOM	1176	NE	ARG	155	-2.977	43.409	49.587	1.00	62.99
ATOM	1177	CZ	ARG	155	-1.826	43.969	49.227	1.00	63.25
ATOM	1178	NH1	ARG	155	-1.773	44.750	48.157	1.00	63.93
ATOM	1179	NH2	ARG	155	-0.727	43.753	49.938	1.00	63.47
ATOM	1180	C	ARG	155	-7.990	42.771	46.575	1.00	57.05
ATOM	1181	O	ARG	155	-8.123	42.355	45.425	1.00	57.28
ATOM	1182	N	GLY	156	-8.908	43.513	47.184	1.00	55.32
ATOM	1183	CA	GLY	156	-10.136	43.862	46.498	1.00	53.27

ATOM	1184	C	GLY	156	-11.306	43.028	46.976	1.00	52.09
ATOM	1185	O	GLY	156	-11.123	41.930	47.501	1.00	51.92
ATOM	1186	N	ASP	157	-12.511	43.553	46.790	1.00	50.40
ATOM	1187	CA	ASP	157	-13.731	42.872	47.208	1.00	49.29
ATOM	1188	CB	ASP	157	-14.914	43.832	47.090	1.00	50.74
ATOM	1189	CG	ASP	157	-14.693	45.121	47.854	1.00	51.46
ATOM	1190	OD1	ASP	157	-14.893	45.122	49.086	1.00	50.41
ATOM	1191	OD2	ASP	157	-14.304	46.126	47.216	1.00	53.02
ATOM	1192	C	ASP	157	-13.991	41.634	46.358	1.00	48.08
ATOM	1193	O	ASP	157	-14.231	40.544	46.881	1.00	46.48
ATOM	1194	N	GLU	158	-13.942	41.813	45.043	1.00	46.08
ATOM	1195	CA	GLU	158	-14.178	40.718	44.116	1.00	45.63
ATOM	1196	CB	GLU	158	-14.092	41.225	42.675	1.00	48.09
ATOM	1197	CG	GLU	158	-14.387	40.169	41.626	1.00	50.76
ATOM	1198	CD	GLU	158	-14.503	40.755	40.233	1.00	53.13
ATOM	1199	OE1	GLU	158	-15.430	41.564	40.002	1.00	55.10
ATOM	1200	OE2	GLU	158	-13.670	40.411	39.367	1.00	54.38
ATOM	1201	C	GLU	158	-13.187	39.578	44.329	1.00	43.56
ATOM	1202	O	GLU	158	-13.584	38.429	44.529	1.00	42.93
ATOM	1203	N	ALA	159	-11.898	39.899	44.287	1.00	41.57
ATOM	1204	CA	ALA	159	-10.859	38.893	44.482	1.00	39.78
ATOM	1205	CB	ALA	159	-9.482	39.547	44.444	1.00	39.93
ATOM	1206	C	ALA	159	-11.065	38.177	45.814	1.00	38.91
ATOM	1207	O	ALA	159	-10.917	36.958	45.904	1.00	37.78
ATOM	1208	N	GLY	160	-11.419	38.944	46.840	1.00	36.56
ATOM	1209	CA	GLY	160	-11.642	38.371	48.152	1.00	35.21
ATOM	1210	C	GLY	160	-12.818	37.416	48.194	1.00	35.10
ATOM	1211	O	GLY	160	-12.718	36.330	48.768	1.00	34.10
ATOM	1212	N	ASP	161	-13.935	37.813	47.591	1.00	33.83
ATOM	1213	CA	ASP	161	-15.126	36.971	47.575	1.00	33.55
ATOM	1214	CB	ASP	161	-16.335	37.747	47.038	1.00	34.86
ATOM	1215	CG	ASP	161	-16.651	38.986	47.861	1.00	35.97
ATOM	1216	OD1	ASP	161	-16.702	38.890	49.109	1.00	34.80
ATOM	1217	OD2	ASP	161	-16.862	40.056	47.255	1.00	37.49
ATOM	1218	C	ASP	161	-14.897	35.727	46.718	1.00	32.66
ATOM	1219	O	ASP	161	-15.553	34.704	46.910	1.00	30.79
ATOM	1220	N	GLN	162	-13.967	35.822	45.773	1.00	33.43
ATOM	1221	CA	GLN	162	-13.657	34.696	44.901	1.00	34.32
ATOM	1222	CB	GLN	162	-12.810	35.160	43.712	1.00	35.93
ATOM	1223	CG	GLN	162	-12.549	34.069	42.680	1.00	40.84
ATOM	1224	CD	GLN	162	-13.827	33.377	42.235	1.00	43.13
ATOM	1225	OE1	GLN	162	-14.770	34.023	41.774	1.00	45.74
ATOM	1226	NE2	GLN	162	-13.866	32.056	42.374	1.00	44.65
ATOM	1227	C	GLN	162	-12.915	33.613	45.683	1.00	32.85
ATOM	1228	O	GLN	162	-13.236	32.429	45.575	1.00	32.77
ATOM	1229	N	LEU	163	-11.928	34.022	46.474	1.00	31.71
ATOM	1230	CA	LEU	163	-11.159	33.074	47.275	1.00	31.82
ATOM	1231	CB	LEU	163	-10.025	33.792	48.017	1.00	33.87
ATOM	1232	CG	LEU	163	-8.879	34.358	47.173	1.00	35.14
ATOM	1233	CD1	LEU	163	-7.918	35.131	48.064	1.00	36.34
ATOM	1234	CD2	LEU	163	-8.146	33.222	46.472	1.00	36.72
ATOM	1235	C	LEU	163	-12.059	32.363	48.279	1.00	31.54
ATOM	1236	O	LEU	163	-11.968	31.150	48.456	1.00	30.72
ATOM	1237	N	LEU	164	-12.932	33.124	48.934	1.00	30.37
ATOM	1238	CA	LEU	164	-13.848	32.556	49.915	1.00	29.45
ATOM	1239	CB	LEU	164	-14.702	33.669	50.530	1.00	31.08
ATOM	1240	CG	LEU	164	-15.296	33.451	51.925	1.00	31.21
ATOM	1241	CD1	LEU	164	-16.045	34.715	52.346	1.00	35.31
ATOM	1242	CD2	LEU	164	-16.218	32.261	51.937	1.00	32.29
ATOM	1243	C	LEU	164	-14.737	31.540	49.203	1.00	28.86
ATOM	1244	O	LEU	164	-15.058	30.480	49.744	1.00	28.39
ATOM	1245	N	SER	165	-15.126	31.876	47.978	1.00	27.45
ATOM	1246	CA	SER	165	-15.973	31.004	47.173	1.00	28.46
ATOM	1247	CB	SER	165	-16.356	31.709	45.867	1.00	26.87
ATOM	1248	OG	SER	165	-17.280	30.932	45.133	1.00	31.92
ATOM	1249	C	SER	165	-15.243	29.699	46.856	1.00	26.43
ATOM	1250	O	SER	165	-15.796	28.611	47.010	1.00	27.06
ATOM	1251	N	ASP	166	-13.997	29.820	46.412	1.00	26.79
ATOM	1252	CA	ASP	166	-13.194	28.648	46.078	1.00	25.84
ATOM	1253	CB	ASP	166	-11.881	29.057	45.407	1.00	27.39
ATOM	1254	CG	ASP	166	-12.086	29.645	44.028	1.00	28.71
ATOM	1255	OD1	ASP	166	-12.913	29.099	43.262	1.00	31.41
ATOM	1256	OD2	ASP	166	-11.407	30.644	43.696	1.00	28.72
ATOM	1257	C	ASP	166	-12.886	27.840	47.331	1.00	25.65
ATOM	1258	O	ASP	166	-12.769	26.615	47.275	1.00	25.23
ATOM	1259	N	ALA	167	-12.750	28.534	48.459	1.00	23.48
ATOM	1260	CA	ALA	167	-12.454	27.893	49.733	1.00	22.78

ATOM	1261	CB	ALA	167	-12.184	28.956	50.806	1.00	23.00
ATOM	1262	C	ALA	167	-13.599	26.991	50.169	1.00	21.48
ATOM	1263	O	ALA	167	-13.387	25.833	50.532	1.00	19.60
ATOM	1264	N	LEU	168	-14.817	27.523	50.150	1.00	21.01
ATOM	1265	CA	LEU	168	-15.983	26.734	50.534	1.00	20.93
ATOM	1266	CB	LEU	168	-17.228	27.622	50.596	1.00	21.15
ATOM	1267	CG	LEU	168	-17.387	28.514	51.831	1.00	19.76
ATOM	1268	CD1	LEU	168	-18.297	29.693	51.501	1.00	21.84
ATOM	1269	CD2	LEU	168	-17.967	27.699	52.978	1.00	20.27
ATOM	1270	C	LEU	168	-16.199	25.630	49.509	1.00	20.35
ATOM	1271	O	LEU	168	-16.610	24.527	49.855	1.00	21.26
ATOM	1272	N	ALA	169	-15.925	25.943	48.248	1.00	21.84
ATOM	1273	CA	ALA	169	-16.088	24.984	47.161	1.00	22.58
ATOM	1274	CB	ALA	169	-15.774	25.648	45.829	1.00	19.71
ATOM	1275	C	ALA	169	-15.198	23.764	47.368	1.00	23.26
ATOM	1276	O	ALA	169	-15.638	22.626	47.192	1.00	23.84
ATOM	1277	N	LEU	170	-13.944	24.004	47.737	1.00	22.11
ATOM	1278	CA	LEU	170	-13.005	22.915	47.974	1.00	21.77
ATOM	1279	CB	LEU	170	-11.585	23.473	48.169	1.00	19.66
ATOM	1280	CG	LEU	170	-10.934	24.127	46.939	1.00	17.91
ATOM	1281	CD1	LEU	170	-9.666	24.896	47.340	1.00	19.18
ATOM	1282	CD2	LEU	170	-10.595	23.043	45.910	1.00	18.15
ATOM	1283	C	LEU	170	-13.447	22.114	49.198	1.00	20.95
ATOM	1284	O	LEU	170	-13.408	20.888	49.185	1.00	20.34
ATOM	1285	N	GLU	171	-13.883	22.803	50.253	1.00	21.68
ATOM	1286	CA	GLU	171	-14.332	22.116	51.461	1.00	21.25
ATOM	1287	CB	GLU	171	-14.746	23.129	52.536	1.00	22.53
ATOM	1288	CG	GLU	171	-15.385	22.502	53.775	1.00	25.91
ATOM	1289	CD	GLU	171	-15.745	23.536	54.834	1.00	27.19
ATOM	1290	OE1	GLU	171	-16.404	24.538	54.477	1.00	27.15
ATOM	1291	OE2	GLU	171	-15.377	23.342	56.016	1.00	27.26
ATOM	1292	C	GLU	171	-15.504	21.195	51.149	1.00	21.24
ATOM	1293	O	GLU	171	-15.538	20.044	51.592	1.00	21.38
ATOM	1294	N	ALA	172	-16.460	21.701	50.374	1.00	21.12
ATOM	1295	CA	ALA	172	-17.637	20.919	50.013	1.00	21.23
ATOM	1296	CB	ALA	172	-18.651	21.807	49.299	1.00	21.68
ATOM	1297	C	ALA	172	-17.272	19.724	49.134	1.00	20.21
ATOM	1298	O	ALA	172	-17.953	18.695	49.147	1.00	19.47
ATOM	1299	N	ALA	173	-16.192	19.866	48.374	1.00	22.48
ATOM	1300	CA	ALA	173	-15.725	18.801	47.491	1.00	19.03
ATOM	1301	CB	ALA	173	-14.767	19.379	46.444	1.00	20.74
ATOM	1302	C	ALA	173	-15.034	17.690	48.286	1.00	21.09
ATOM	1303	O	ALA	173	-14.845	16.575	47.792	1.00	20.88
ATOM	1304	N	GLY	174	-14.651	18.000	49.520	1.00	20.56
ATOM	1305	CA	GLY	174	-14.011	16.998	50.352	1.00	20.44
ATOM	1306	C	GLY	174	-12.664	17.365	50.949	1.00	19.70
ATOM	1307	O	GLY	174	-12.077	16.559	51.669	1.00	19.40
ATOM	1308	N	ALA	175	-12.157	18.559	50.658	1.00	20.44
ATOM	1309	CA	ALA	175	-10.871	18.964	51.218	1.00	19.55
ATOM	1310	CB	ALA	175	-10.464	20.316	50.677	1.00	20.28
ATOM	1311	C	ALA	175	-10.972	19.006	52.747	1.00	21.76
ATOM	1312	O	ALA	175	-11.891	19.610	53.297	1.00	20.48
ATOM	1313	N	GLN	176	-10.037	18.347	53.431	1.00	20.03
ATOM	1314	CA	GLN	176	-10.041	18.310	54.892	1.00	20.58
ATOM	1315	CB	GLN	176	-9.654	16.916	55.392	1.00	20.99
ATOM	1316	CG	GLN	176	-10.582	15.828	54.889	1.00	23.71
ATOM	1317	CD	GLN	176	-10.327	14.487	55.535	1.00	25.55
ATOM	1318	OE1	GLN	176	-10.614	14.291	56.713	1.00	29.79
ATOM	1319	NE2	GLN	176	-9.785	13.554	54.766	1.00	27.44
ATOM	1320	C	GLN	176	-9.096	19.349	55.487	1.00	20.58
ATOM	1321	O	GLN	176	-9.021	19.515	56.705	1.00	19.49
ATOM	1322	N	LEU	177	-8.376	20.037	54.610	1.00	20.99
ATOM	1323	CA	LEU	177	-7.440	21.074	55.001	1.00	21.65
ATOM	1324	CB	LEU	177	-6.063	20.478	55.315	1.00	22.64
ATOM	1325	CG	LEU	177	-5.821	20.041	56.763	1.00	25.50
ATOM	1326	CD1	LEU	177	-4.483	19.321	56.874	1.00	24.79
ATOM	1327	CD2	LEU	177	-5.838	21.272	57.670	1.00	24.33
ATOM	1328	C	LEU	177	-7.308	22.097	53.885	1.00	22.00
ATOM	1329	O	LEU	177	-7.529	21.792	52.709	1.00	20.39
ATOM	1330	N	LEU	178	-6.948	23.317	54.261	1.00	19.35
ATOM	1331	CA	LEU	178	-6.779	24.386	53.295	1.00	20.42
ATOM	1332	CB	LEU	178	-8.063	25.211	53.180	1.00	19.08
ATOM	1333	CG	LEU	178	-7.947	26.457	52.297	1.00	21.83
ATOM	1334	CD1	LEU	178	-7.793	26.056	50.832	1.00	22.51
ATOM	1335	CD2	LEU	178	-9.187	27.327	52.472	1.00	21.62
ATOM	1336	C	LEU	178	-5.630	25.304	53.681	1.00	21.17
ATOM	1337	O	LEU	178	-5.499	25.703	54.838	1.00	21.61

ATOM	1338	N	VAL	179	-4.803	25.630	52.696	1.00	20.87
ATOM	1339	CA	VAL	179	-3.672	26.518	52.893	1.00	21.64
ATOM	1340	CB	VAL	179	-2.360	25.910	52.320	1.00	21.83
ATOM	1341	CG1	VAL	179	-1.280	26.985	52.238	1.00	21.50
ATOM	1342	CG2	VAL	179	-1.876	24.760	53.204	1.00	16.70
ATOM	1343	C	VAL	179	-3.945	27.843	52.182	1.00	23.89
ATOM	1344	O	VAL	179	-4.370	27.865	51.020	1.00	22.84
ATOM	1345	N	LEU	180	-3.718	28.941	52.900	1.00	25.31
ATOM	1346	CA	LEU	180	-3.898	30.291	52.363	1.00	27.62
ATOM	1347	CB	LEU	180	-4.873	31.098	53.223	1.00	29.45
ATOM	1348	CG	LEU	180	-6.349	30.724	53.135	1.00	32.82
ATOM	1349	CD1	LEU	180	-7.138	31.542	54.147	1.00	31.62
ATOM	1350	CD2	LEU	180	-6.861	30.980	51.720	1.00	30.67
ATOM	1351	C	LEU	180	-2.537	30.962	52.398	1.00	27.37
ATOM	1352	O	LEU	180	-1.943	31.094	53.464	1.00	26.56
ATOM	1353	N	GLU	181	-2.052	31.383	51.235	1.00	28.04
ATOM	1354	CA	GLU	181	-0.743	32.017	51.131	1.00	30.09
ATOM	1355	CB	GLU	181	0.131	31.261	50.123	1.00	30.40
ATOM	1356	CG	GLU	181	1.579	31.735	50.082	1.00	33.41
ATOM	1357	CD	GLU	181	2.419	30.986	49.064	1.00	35.66
ATOM	1358	OE1	GLU	181	2.297	29.747	48.986	1.00	35.41
ATOM	1359	OE2	GLU	181	3.213	31.632	48.349	1.00	38.36
ATOM	1360	C	GLU	181	-0.821	33.477	50.709	1.00	30.13
ATOM	1361	O	GLU	181	-1.465	33.809	49.714	1.00	31.04
ATOM	1362	N	CYS	182	-0.154	34.337	51.474	1.00	30.42
ATOM	1363	CA	CYS	182	-0.097	35.764	51.195	1.00	31.63
ATOM	1364	CB	CYS	182	0.946	36.026	50.111	1.00	31.93
ATOM	1365	SG	CYS	182	2.594	35.443	50.588	1.00	36.42
ATOM	1366	C	CYS	182	-1.430	36.382	50.803	1.00	31.83
ATOM	1367	O	CYS	182	-1.683	36.677	49.632	1.00	30.94
ATOM	1368	N	VAL	183	-2.273	36.580	51.807	1.00	31.93
ATOM	1369	CA	VAL	183	-3.587	37.165	51.614	1.00	34.24
ATOM	1370	CB	VAL	183	-4.674	36.054	51.575	1.00	33.56
ATOM	1371	CG1	VAL	183	-4.945	35.517	52.974	1.00	34.62
ATOM	1372	CG2	VAL	183	-5.936	36.580	50.944	1.00	35.73
ATOM	1373	C	VAL	183	-3.846	38.118	52.786	1.00	35.32
ATOM	1374	O	VAL	183	-3.400	37.870	53.909	1.00	36.95
ATOM	1375	N	PRO	184	-4.556	39.232	52.538	1.00	35.89
ATOM	1376	CD	PRO	184	-5.239	39.654	51.302	1.00	35.39
ATOM	1377	CA	PRO	184	-4.827	40.170	53.631	1.00	34.72
ATOM	1378	CB	PRO	184	-5.751	41.203	52.980	1.00	35.50
ATOM	1379	CG	PRO	184	-6.394	40.449	51.849	1.00	36.10
ATOM	1380	C	PRO	184	-5.458	39.476	54.834	1.00	33.29
ATOM	1381	O	PRO	184	-6.384	38.679	54.688	1.00	33.08
ATOM	1382	N	VAL	185	-4.945	39.784	56.022	1.00	33.66
ATOM	1383	CA	VAL	185	-5.440	39.184	57.261	1.00	33.09
ATOM	1384	CB	VAL	185	-4.917	39.936	58.504	1.00	33.17
ATOM	1385	CG1	VAL	185	-5.309	39.182	59.763	1.00	33.65
ATOM	1386	CG2	VAL	185	-3.415	40.099	58.430	1.00	31.75
ATOM	1387	C	VAL	185	-6.960	39.165	57.338	1.00	33.78
ATOM	1388	O	VAL	185	-7.559	38.166	57.739	1.00	33.51
ATOM	1389	N	GLU	186	-7.577	40.282	56.968	1.00	35.07
ATOM	1390	CA	GLU	186	-9.030	40.407	56.991	1.00	36.33
ATOM	1391	CB	GLU	186	-9.445	41.766	56.417	1.00	37.40
ATOM	1392	CG	GLU	186	-8.658	42.181	55.181	1.00	42.15
ATOM	1393	CD	GLU	186	-7.468	43.080	55.508	1.00	44.18
ATOM	1394	OE1	GLU	186	-6.790	42.840	56.533	1.00	43.77
ATOM	1395	OE2	GLU	186	-7.205	44.022	54.726	1.00	45.83
ATOM	1396	C	GLU	186	-9.712	39.289	56.208	1.00	35.05
ATOM	1397	O	GLU	186	-10.704	38.714	56.659	1.00	35.07
ATOM	1398	N	LEU	187	-9.178	38.986	55.031	1.00	34.38
ATOM	1399	CA	LEU	187	-9.743	37.941	54.188	1.00	33.21
ATOM	1400	CB	LEU	187	-9.079	37.971	52.809	1.00	35.04
ATOM	1401	CG	LEU	187	-9.927	37.542	51.607	1.00	36.74
ATOM	1402	CD1	LEU	187	-9.075	37.607	50.351	1.00	37.59
ATOM	1403	CD2	LEU	187	-10.475	36.146	51.807	1.00	36.68
ATOM	1404	C	LEU	187	-9.533	36.577	54.836	1.00	32.03
ATOM	1405	O	LEU	187	-10.431	35.735	54.839	1.00	30.51
ATOM	1406	N	ALA	188	-8.340	36.364	55.386	1.00	31.07
ATOM	1407	CA	ALA	188	-8.012	35.102	56.039	1.00	31.01
ATOM	1408	CB	ALA	188	-6.576	35.138	56.554	1.00	30.06
ATOM	1409	C	ALA	188	-8.979	34.822	57.182	1.00	30.77
ATOM	1410	O	ALA	188	-9.345	33.673	57.424	1.00	30.09
ATOM	1411	N	LYS	189	-9.396	35.880	57.876	1.00	32.19
ATOM	1412	CA	LYS	189	-10.332	35.755	58.992	1.00	33.17
ATOM	1413	CB	LYS	189	-10.573	37.119	59.653	1.00	35.50
ATOM	1414	CG	LYS	189	-9.321	37.829	60.131	1.00	41.20

ATOM	1415	CD	LYS	189	-9.644	39.151	60.826	1.00	44.52
ATOM	1416	CE	LYS	189	-8.375	39.807	61.361	1.00	46.20
ATOM	1417	NZ	LYS	189	-8.623	41.120	62.025	1.00	49.12
ATOM	1418	C	LYS	189	-11.672	35.201	58.520	1.00	32.13
ATOM	1419	O	LYS	189	-12.226	34.284	59.130	1.00	32.62
ATOM	1420	N	ARG	190	-12.193	35.772	57.437	1.00	32.40
ATOM	1421	CA	ARG	190	-13.478	35.343	56.887	1.00	33.08
ATOM	1422	CB	ARG	190	-13.839	36.172	55.650	1.00	34.06
ATOM	1423	CG	ARG	190	-14.021	37.652	55.906	1.00	37.30
ATOM	1424	CD	ARG	190	-14.906	38.274	54.834	1.00	38.35
ATOM	1425	NE	ARG	190	-14.261	38.346	53.528	1.00	38.64
ATOM	1426	CZ	ARG	190	-14.920	38.343	52.373	1.00	38.37
ATOM	1427	NH1	ARG	190	-16.242	38.262	52.364	1.00	37.74
ATOM	1428	NH2	ARG	190	-14.265	38.435	51.223	1.00	38.25
ATOM	1429	C	ARG	190	-13.480	33.869	56.508	1.00	31.06
ATOM	1430	O	ARG	190	-14.363	33.115	56.913	1.00	31.92
ATOM	1431	N	ILE	191	-12.488	33.466	55.723	1.00	31.60
ATOM	1432	CA	ILE	191	-12.391	32.081	55.283	1.00	30.50
ATOM	1433	CB	ILE	191	-11.197	31.887	54.322	1.00	32.14
ATOM	1434	CG2	ILE	191	-11.045	30.412	53.965	1.00	32.40
ATOM	1435	CG1	ILE	191	-11.415	32.724	53.057	1.00	32.62
ATOM	1436	CD1	ILE	191	-10.227	32.763	52.116	1.00	33.46
ATOM	1437	C	ILE	191	-12.245	31.133	56.466	1.00	29.60
ATOM	1438	O	ILE	191	-12.885	30.084	56.509	1.00	29.78
ATOM	1439	N	THR	192	-11.410	31.509	57.428	1.00	28.46
ATOM	1440	CA	THR	192	-11.190	30.673	58.597	1.00	28.93
ATOM	1441	CB	THR	192	-10.100	31.269	59.514	1.00	28.24
ATOM	1442	OG1	THR	192	-8.870	31.379	58.788	1.00	28.74
ATOM	1443	CG2	THR	192	-9.878	30.380	60.723	1.00	27.20
ATOM	1444	C	THR	192	-12.472	30.478	59.402	1.00	29.99
ATOM	1445	O	THR	192	-12.747	29.378	59.885	1.00	28.00
ATOM	1446	N	GLU	193	-13.257	31.542	59.548	1.00	31.93
ATOM	1447	CA	GLU	193	-14.507	31.451	60.295	1.00	33.82
ATOM	1448	CB	GLU	193	-15.021	32.845	60.666	1.00	36.65
ATOM	1449	CG	GLU	193	-14.225	33.543	61.751	1.00	41.54
ATOM	1450	CD	GLU	193	-14.789	34.912	62.097	1.00	44.86
ATOM	1451	OE1	GLU	193	-14.740	35.816	61.233	1.00	45.51
ATOM	1452	OE2	GLU	193	-15.284	35.083	63.236	1.00	47.21
ATOM	1453	C	GLU	193	-15.567	30.725	59.480	1.00	32.10
ATOM	1454	O	GLU	193	-16.372	29.974	60.023	1.00	33.17
ATOM	1455	N	ALA	194	-15.554	30.947	58.172	1.00	31.90
ATOM	1456	CA	ALA	194	-16.523	30.327	57.278	1.00	30.74
ATOM	1457	CB	ALA	194	-16.446	30.980	55.910	1.00	30.76
ATOM	1458	C	ALA	194	-16.352	28.818	57.140	1.00	30.69
ATOM	1459	O	ALA	194	-17.338	28.083	57.051	1.00	30.09
ATOM	1460	N	LEU	195	-15.106	28.353	57.123	1.00	29.16
ATOM	1461	CA	LEU	195	-14.848	26.928	56.967	1.00	27.62
ATOM	1462	CB	LEU	195	-13.555	26.704	56.173	1.00	28.66
ATOM	1463	CG	LEU	195	-13.422	27.386	54.805	1.00	29.78
ATOM	1464	CD1	LEU	195	-12.296	26.713	54.020	1.00	28.71
ATOM	1465	CD2	LEU	195	-14.723	27.288	54.034	1.00	30.26
ATOM	1466	C	LEU	195	-14.774	26.156	58.279	1.00	26.86
ATOM	1467	O	LEU	195	-14.280	26.658	59.290	1.00	26.51
ATOM	1468	N	ALA	196	-15.289	24.931	58.247	1.00	24.22
ATOM	1469	CA	ALA	196	-15.282	24.046	59.403	1.00	24.93
ATOM	1470	CB	ALA	196	-16.392	23.011	59.275	1.00	25.42
ATOM	1471	C	ALA	196	-13.928	23.351	59.464	1.00	25.63
ATOM	1472	O	ALA	196	-13.461	22.973	60.537	1.00	24.87
ATOM	1473	N	ILE	197	-13.307	23.174	58.299	1.00	25.00
ATOM	1474	CA	ILE	197	-12.003	22.527	58.225	1.00	23.95
ATOM	1475	CB	ILE	197	-11.698	22.011	56.800	1.00	22.76
ATOM	1476	CG2	ILE	197	-12.670	20.901	56.426	1.00	21.58
ATOM	1477	CG1	ILE	197	-11.782	23.156	55.796	1.00	22.43
ATOM	1478	CD1	ILE	197	-11.166	22.818	54.447	1.00	24.79
ATOM	1479	C	ILE	197	-10.910	23.505	58.628	1.00	24.38
ATOM	1480	O	ILE	197	-11.011	24.709	58.381	1.00	24.17
ATOM	1481	N	PRO	198	-9.845	23.001	59.260	1.00	24.33
ATOM	1482	CD	PRO	198	-9.578	21.616	59.681	1.00	23.43
ATOM	1483	CA	PRO	198	-8.768	23.903	59.668	1.00	24.80
ATOM	1484	CB	PRO	198	-7.840	22.994	60.482	1.00	24.52
ATOM	1485	CG	PRO	198	-8.104	21.638	59.926	1.00	26.07
ATOM	1486	C	PRO	198	-8.070	24.579	58.489	1.00	23.71
ATOM	1487	O	PRO	198	-7.840	23.965	57.445	1.00	24.75
ATOM	1488	N	VAL	199	-7.765	25.859	58.659	1.00	22.66
ATOM	1489	CA	VAL	199	-7.090	26.628	57.633	1.00	21.26
ATOM	1490	CB	VAL	199	-7.840	27.952	57.343	1.00	21.86
ATOM	1491	CG1	VAL	199	-7.104	28.753	56.286	1.00	21.68

ATOM	1492	CG2	VAL	199	-9.261	27.651	56.881	1.00	23.56
ATOM	1493	C	VAL	199	-5.677	26.948	58.113	1.00	22.90
ATOM	1494	O	VAL	199	-5.489	27.514	59.191	1.00	21.18
ATOM	1495	N	ILE	200	-4.689	26.568	57.311	1.00	21.02
ATOM	1496	CA	ILE	200	-3.286	26.799	57.633	1.00	20.82
ATOM	1497	CB	ILE	200	-2.425	25.579	57.265	1.00	22.17
ATOM	1498	CG2	ILE	200	-0.956	25.857	57.584	1.00	21.54
ATOM	1499	CG1	ILE	200	-2.925	24.346	58.015	1.00	21.31
ATOM	1500	CD1	ILE	200	-2.202	23.066	57.627	1.00	26.13
ATOM	1501	C	ILE	200	-2.800	27.984	56.821	1.00	21.27
ATOM	1502	O	ILE	200	-2.820	27.952	55.590	1.00	19.70
ATOM	1503	N	GLY	201	-2.344	29.025	57.505	1.00	21.83
ATOM	1504	CA	GLY	201	-1.883	30.199	56.791	1.00	21.11
ATOM	1505	C	GLY	201	-0.382	30.376	56.722	1.00	21.20
ATOM	1506	O	GLY	201	0.360	29.915	57.586	1.00	20.91
ATOM	1507	N	ILE	202	0.053	31.035	55.656	1.00	20.88
ATOM	1508	CA	ILE	202	1.449	31.357	55.434	1.00	23.63
ATOM	1509	CB	ILE	202	2.135	30.374	54.442	1.00	25.53
ATOM	1510	CG2	ILE	202	1.199	30.026	53.295	1.00	25.11
ATOM	1511	CG1	ILE	202	3.431	30.991	53.922	1.00	26.37
ATOM	1512	CD1	ILE	202	4.537	31.025	54.938	1.00	25.90
ATOM	1513	C	ILE	202	1.401	32.754	54.827	1.00	23.67
ATOM	1514	O	ILE	202	1.098	32.921	53.647	1.00	24.24
ATOM	1515	N	GLY	203	1.672	33.760	55.649	1.00	24.85
ATOM	1516	CA	GLY	203	1.615	35.130	55.177	1.00	24.91
ATOM	1517	C	GLY	203	0.167	35.580	55.162	1.00	24.72
ATOM	1518	O	GLY	203	-0.222	36.447	54.378	1.00	26.70
ATOM	1519	N	ALA	204	-0.635	34.981	56.037	1.00	24.39
ATOM	1520	CA	ALA	204	-2.054	35.308	56.132	1.00	25.25
ATOM	1521	CB	ALA	204	-2.889	34.113	55.704	1.00	25.27
ATOM	1522	C	ALA	204	-2.467	35.745	57.538	1.00	25.30
ATOM	1523	O	ALA	204	-3.648	35.701	57.885	1.00	26.25
ATOM	1524	N	GLY	205	-1.495	36.155	58.346	1.00	26.07
ATOM	1525	CA	GLY	205	-1.798	36.597	59.699	1.00	25.17
ATOM	1526	C	GLY	205	-1.952	35.459	60.688	1.00	25.65
ATOM	1527	O	GLY	205	-1.853	34.294	60.316	1.00	24.90
ATOM	1528	N	ASN	206	-2.195	35.791	61.952	1.00	24.53
ATOM	1529	CA	ASN	206	-2.350	34.772	62.983	1.00	24.06
ATOM	1530	CB	ASN	206	-1.739	35.250	64.298	1.00	25.67
ATOM	1531	CG	ASN	206	-2.512	36.405	64.915	1.00	27.21
ATOM	1532	OD1	ASN	206	-2.316	36.744	66.081	1.00	27.76
ATOM	1533	ND2	ASN	206	-3.393	37.016	64.131	1.00	24.74
ATOM	1534	C	ASN	206	-3.805	34.407	63.230	1.00	22.53
ATOM	1535	O	ASN	206	-4.127	33.788	64.246	1.00	21.69
ATOM	1536	N	VAL	207	-4.680	34.786	62.305	1.00	21.94
ATOM	1537	CA	VAL	207	-6.098	34.496	62.446	1.00	23.84
ATOM	1538	CB	VAL	207	-6.953	35.513	61.668	1.00	26.20
ATOM	1539	CG1	VAL	207	-8.423	35.336	62.037	1.00	29.08
ATOM	1540	CG2	VAL	207	-6.488	36.925	61.981	1.00	27.68
ATOM	1541	C	VAL	207	-6.453	33.091	61.965	1.00	24.32
ATOM	1542	O	VAL	207	-7.563	32.600	62.203	1.00	23.30
ATOM	1543	N	THR	208	-5.513	32.431	61.297	1.00	23.32
ATOM	1544	CA	THR	208	-5.779	31.086	60.811	1.00	23.51
ATOM	1545	CB	THR	208	-4.840	30.708	59.643	1.00	23.12
ATOM	1546	OG1	THR	208	-3.481	30.977	60.008	1.00	21.10
ATOM	1547	CG2	THR	208	-5.198	31.502	58.402	1.00	23.13
ATOM	1548	C	THR	208	-5.663	30.053	61.919	1.00	24.29
ATOM	1549	O	THR	208	-5.129	30.331	62.995	1.00	24.25
ATOM	1550	N	ASP	209	-6.185	28.861	61.657	1.00	22.58
ATOM	1551	CA	ASP	209	-6.164	27.788	62.642	1.00	22.69
ATOM	1552	CB	ASP	209	-7.091	26.665	62.194	1.00	22.67
ATOM	1553	CG	ASP	209	-8.501	27.146	61.961	1.00	25.87
ATOM	1554	OD1	ASP	209	-9.130	27.621	62.931	1.00	23.71
ATOM	1555	OD2	ASP	209	-8.980	27.056	60.808	1.00	24.21
ATOM	1556	C	ASP	209	-4.764	27.244	62.830	1.00	21.49
ATOM	1557	O	ASP	209	-4.451	26.657	63.863	1.00	21.81
ATOM	1558	N	GLY	210	-3.928	27.444	61.819	1.00	21.84
ATOM	1559	CA	GLY	210	-2.569	26.956	61.891	1.00	20.56
ATOM	1560	C	GLY	210	-1.623	27.775	61.043	1.00	20.58
ATOM	1561	O	GLY	210	-2.049	28.651	60.287	1.00	21.05
ATOM	1562	N	GLN	211	-0.332	27.473	61.156	1.00	20.83
ATOM	1563	CA	GLN	211	0.699	28.192	60.424	1.00	21.52
ATOM	1564	CB	GLN	211	1.459	29.119	61.379	1.00	22.07
ATOM	1565	CG	GLN	211	0.626	30.239	61.993	1.00	19.78
ATOM	1566	CD	GLN	211	0.135	31.229	60.960	1.00	21.63
ATOM	1567	OE1	GLN	211	0.895	31.663	60.093	1.00	23.63
ATOM	1568	NE2	GLN	211	-1.139	31.608	61.055	1.00	21.71

ATOM	1569	C	GLN	211	1.701	27.250	59.761	1.00	21.50
ATOM	1570	O	GLN	211	1.886	26.117	60.199	1.00	20.81
ATOM	1571	N	ILE	212	2.344	27.724	58.700	1.00	22.48
ATOM	1572	CA	ILE	212	3.351	26.921	58.023	1.00	26.35
ATOM	1573	CB	ILE	212	2.755	26.171	56.799	1.00	28.17
ATOM	1574	CG2	ILE	212	2.484	27.139	55.660	1.00	29.37
ATOM	1575	CG1	ILE	212	3.725	25.075	56.344	1.00	29.11
ATOM	1576	CD1	ILE	212	3.081	24.015	55.457	1.00	31.12
ATOM	1577	C	ILE	212	4.494	27.829	57.588	1.00	28.11
ATOM	1578	O	ILE	212	4.287	29.011	57.319	1.00	29.09
ATOM	1579	N	LEU	213	5.706	27.287	57.556	1.00	29.45
ATOM	1580	CA	LEU	213	6.870	28.062	57.135	1.00	31.99
ATOM	1581	CB	LEU	213	7.432	28.880	58.300	1.00	33.40
ATOM	1582	CG	LEU	213	7.351	30.415	58.241	1.00	33.83
ATOM	1583	CD1	LEU	213	8.119	30.972	59.435	1.00	32.93
ATOM	1584	CD2	LEU	213	7.941	30.952	56.936	1.00	31.79
ATOM	1585	C	LEU	213	7.970	27.159	56.602	1.00	32.15
ATOM	1586	O	LEU	213	8.143	26.033	57.076	1.00	31.38
ATOM	1587	N	VAL	214	8.699	27.656	55.607	1.00	31.01
ATOM	1588	CA	VAL	214	9.808	26.913	55.025	1.00	30.31
ATOM	1589	CB	VAL	214	10.300	27.550	53.695	1.00	31.87
ATOM	1590	CG1	VAL	214	11.516	26.796	53.174	1.00	32.34
ATOM	1591	CG2	VAL	214	9.188	27.505	52.659	1.00	33.39
ATOM	1592	C	VAL	214	10.923	26.976	56.060	1.00	28.15
ATOM	1593	O	VAL	214	11.440	28.050	56.362	1.00	28.96
ATOM	1594	N	MET	215	11.268	25.820	56.614	1.00	25.80
ATOM	1595	CA	MET	215	12.299	25.727	57.632	1.00	24.04
ATOM	1596	CB	MET	215	12.617	24.254	57.927	1.00	21.67
ATOM	1597	CG	MET	215	13.046	23.449	56.708	1.00	21.44
ATOM	1598	SD	MET	215	14.311	22.218	57.084	1.00	19.28
ATOM	1599	CE	MET	215	15.756	23.248	56.942	1.00	20.16
ATOM	1600	C	MET	215	13.575	26.465	57.253	1.00	23.77
ATOM	1601	O	MET	215	14.253	27.025	58.114	1.00	24.19
ATOM	1602	N	HIS	216	13.901	26.489	55.966	1.00	23.61
ATOM	1603	CA	HIS	216	15.122	27.163	55.520	1.00	25.02
ATOM	1604	CB	HIS	216	15.342	26.890	54.035	1.00	25.17
ATOM	1605	CG	HIS	216	15.707	25.468	53.751	1.00	25.07
ATOM	1606	CD2	HIS	216	14.939	24.360	53.621	1.00	22.61
ATOM	1607	ND1	HIS	216	17.014	25.039	53.656	1.00	24.95
ATOM	1608	CE1	HIS	216	17.035	23.730	53.479	1.00	23.43
ATOM	1609	NE2	HIS	216	15.788	23.294	53.455	1.00	26.42
ATOM	1610	C	HIS	216	15.132	28.659	55.812	1.00	26.05
ATOM	1611	O	HIS	216	16.195	29.277	55.872	1.00	25.85
ATOM	1612	N	ASP	217	13.949	29.238	56.000	1.00	27.68
ATOM	1613	CA	ASP	217	13.848	30.661	56.321	1.00	31.25
ATOM	1614	CB	ASP	217	12.576	31.271	55.713	1.00	33.06
ATOM	1615	CG	ASP	217	12.653	31.406	54.200	1.00	35.27
ATOM	1616	OD1	ASP	217	13.623	32.016	53.700	1.00	36.27
ATOM	1617	OD2	ASP	217	11.735	30.916	53.507	1.00	37.69
ATOM	1618	C	ASP	217	13.827	30.825	57.845	1.00	31.02
ATOM	1619	O	ASP	217	14.353	31.803	58.394	1.00	32.35
ATOM	1620	N	ALA	218	13.225	29.853	58.524	1.00	30.86
ATOM	1621	CA	ALA	218	13.121	29.882	59.981	1.00	30.59
ATOM	1622	CB	ALA	218	12.208	28.761	60.451	1.00	30.22
ATOM	1623	C	ALA	218	14.471	29.783	60.689	1.00	31.33
ATOM	1624	O	ALA	218	14.593	30.180	61.851	1.00	31.23
ATOM	1625	N	PHE	219	15.482	29.267	59.992	1.00	30.28
ATOM	1626	CA	PHE	219	16.804	29.117	60.589	1.00	29.83
ATOM	1627	CB	PHE	219	17.202	27.640	60.598	1.00	29.92
ATOM	1628	CG	PHE	219	16.148	26.736	61.177	1.00	30.71
ATOM	1629	CD1	PHE	219	15.529	27.052	62.385	1.00	31.14
ATOM	1630	CD2	PHE	219	15.781	25.562	60.524	1.00	31.43
ATOM	1631	CE1	PHE	219	14.562	26.213	62.935	1.00	31.73
ATOM	1632	CE2	PHE	219	14.811	24.714	61.067	1.00	32.41
ATOM	1633	CZ	PHE	219	14.202	25.041	62.275	1.00	31.77
ATOM	1634	C	PHE	219	17.881	29.943	59.899	1.00	29.17
ATOM	1635	O	PHE	219	19.069	29.621	59.968	1.00	29.21
ATOM	1636	N	GLY	220	17.458	31.014	59.237	1.00	29.74
ATOM	1637	CA	GLY	220	18.390	31.889	58.550	1.00	29.75
ATOM	1638	C	GLY	220	19.357	31.185	57.621	1.00	30.84
ATOM	1639	O	GLY	220	20.507	31.601	57.485	1.00	30.29
ATOM	1640	N	ILE	221	18.900	30.120	56.973	1.00	30.94
ATOM	1641	CA	ILE	221	19.754	29.380	56.053	1.00	30.23
ATOM	1642	CB	ILE	221	19.270	27.930	55.896	1.00	28.54
ATOM	1643	CG2	ILE	221	20.167	27.187	54.908	1.00	26.85
ATOM	1644	CG1	ILE	221	19.288	27.239	57.263	1.00	27.41
ATOM	1645	CD1	ILE	221	18.654	25.879	57.279	1.00	26.63

ATOM	1646	C	ILE	221	19.759	30.060	54.691	1.00	31.63
ATOM	1647	O	ILE	221	20.799	30.178	54.041	1.00	30.47
ATOM	1648	N	THR	222	18.590	30.528	54.275	1.00	33.36
ATOM	1649	CA	THR	222	18.453	31.193	52.989	1.00	37.25
ATOM	1650	CB	THR	222	16.981	31.241	52.555	1.00	36.65
ATOM	1651	OG1	THR	222	16.249	32.088	53.448	1.00	39.18
ATOM	1652	CG2	THR	222	16.375	29.851	52.594	1.00	35.68
ATOM	1653	C	THR	222	18.995	32.616	53.029	1.00	39.66
ATOM	1654	O	THR	222	18.770	33.345	53.993	1.00	39.16
ATOM	1655	N	GLY	223	19.713	32.990	51.970	1.00	43.16
ATOM	1656	CA	GLY	223	20.292	34.320	51.848	1.00	47.53
ATOM	1657	C	GLY	223	20.326	35.168	53.105	1.00	50.12
ATOM	1658	O	GLY	223	20.927	34.786	54.110	1.00	51.54
ATOM	1659	N	GLY	224	19.680	36.327	53.052	1.00	51.89
ATOM	1660	CA	GLY	224	19.663	37.202	54.207	1.00	54.05
ATOM	1661	C	GLY	224	18.324	37.871	54.422	1.00	56.18
ATOM	1662	O	GLY	224	17.767	37.824	55.520	1.00	56.72
ATOM	1663	N	HIS	225	17.802	38.495	53.371	1.00	57.60
ATOM	1664	CA	HIS	225	16.520	39.185	53.453	1.00	58.83
ATOM	1665	CB	HIS	225	16.487	40.359	52.470	1.00	61.50
ATOM	1666	CG	HIS	225	17.419	41.475	52.828	1.00	63.93
ATOM	1667	CD2	HIS	225	18.446	42.036	52.146	1.00	65.25
ATOM	1668	ND1	HIS	225	17.338	42.155	54.025	1.00	65.20
ATOM	1669	CE1	HIS	225	18.275	43.087	54.063	1.00	65.92
ATOM	1670	NE2	HIS	225	18.960	43.036	52.935	1.00	66.01
ATOM	1671	C	HIS	225	15.340	38.257	53.183	1.00	57.89
ATOM	1672	O	HIS	225	14.797	38.234	52.079	1.00	58.08
ATOM	1673	N	ILE	226	14.947	37.497	54.201	1.00	56.71
ATOM	1674	CA	ILE	226	13.825	36.573	54.080	1.00	55.07
ATOM	1675	CB	ILE	226	13.651	35.740	55.367	1.00	55.20
ATOM	1676	CG2	ILE	226	14.888	34.885	55.601	1.00	54.98
ATOM	1677	CG1	ILE	226	13.400	36.668	56.558	1.00	54.81
ATOM	1678	CD1	ILE	226	13.109	35.942	57.852	1.00	54.53
ATOM	1679	C	ILE	226	12.541	37.359	53.820	1.00	53.36
ATOM	1680	O	ILE	226	12.499	38.576	54.020	1.00	54.02
ATOM	1681	N	PRO	227	11.473	36.674	53.377	1.00	50.99
ATOM	1682	CD	PRO	227	11.336	35.223	53.161	1.00	49.98
ATOM	1683	CA	PRO	227	10.206	37.361	53.104	1.00	48.87
ATOM	1684	CB	PRO	227	9.319	36.242	52.564	1.00	48.89
ATOM	1685	CG	PRO	227	9.847	35.031	53.259	1.00	49.85
ATOM	1686	C	PRO	227	9.615	38.045	54.336	1.00	46.39
ATOM	1687	O	PRO	227	9.860	37.626	55.465	1.00	46.32
ATOM	1688	N	LYS	228	8.839	39.101	54.108	1.00	44.27
ATOM	1689	CA	LYS	228	8.222	39.850	55.195	1.00	41.95
ATOM	1690	CB	LYS	228	7.360	40.992	54.648	1.00	43.42
ATOM	1691	CG	LYS	228	8.139	42.134	54.016	1.00	47.18
ATOM	1692	CD	LYS	228	8.750	41.736	52.678	1.00	49.90
ATOM	1693	CE	LYS	228	9.498	42.906	52.048	1.00	51.00
ATOM	1694	NZ	LYS	228	10.007	42.601	50.679	1.00	51.75
ATOM	1695	C	LYS	228	7.367	38.987	56.110	1.00	39.05
ATOM	1696	O	LYS	228	7.232	39.278	57.297	1.00	39.22
ATOM	1697	N	PHE	229	6.787	37.927	55.561	1.00	35.73
ATOM	1698	CA	PHE	229	5.935	37.052	56.352	1.00	31.21
ATOM	1699	CB	PHE	229	4.883	36.397	55.453	1.00	32.42
ATOM	1700	CG	PHE	229	5.460	35.543	54.360	1.00	32.78
ATOM	1701	CD1	PHE	229	5.908	34.253	54.625	1.00	32.94
ATOM	1702	CD2	PHE	229	5.554	36.030	53.060	1.00	34.15
ATOM	1703	CE1	PHE	229	6.442	33.457	53.606	1.00	32.72
ATOM	1704	CE2	PHE	229	6.086	35.246	52.034	1.00	33.39
ATOM	1705	CZ	PHE	229	6.529	33.958	52.309	1.00	33.05
ATOM	1706	C	PHE	229	6.707	35.985	57.116	1.00	28.23
ATOM	1707	O	PHE	229	6.126	35.262	57.921	1.00	28.17
ATOM	1708	N	ALA	230	8.013	35.900	56.876	1.00	26.34
ATOM	1709	CA	ALA	230	8.848	34.907	57.544	1.00	24.97
ATOM	1710	CB	ALA	230	9.833	34.304	56.552	1.00	26.85
ATOM	1711	C	ALA	230	9.605	35.484	58.734	1.00	26.01
ATOM	1712	O	ALA	230	9.743	36.700	58.865	1.00	25.21
ATOM	1713	N	LYS	231	10.090	34.596	59.600	1.00	24.27
ATOM	1714	CA	LYS	231	10.838	34.999	60.786	1.00	24.53
ATOM	1715	CB	LYS	231	9.898	35.149	61.989	1.00	25.49
ATOM	1716	CG	LYS	231	10.609	35.476	63.295	1.00	25.37
ATOM	1717	CD	LYS	231	9.634	35.596	64.455	1.00	28.18
ATOM	1718	CE	LYS	231	10.372	35.784	65.780	1.00	29.49
ATOM	1719	NZ	LYS	231	9.434	35.995	66.923	1.00	29.09
ATOM	1720	C	LYS	231	11.919	33.977	61.118	1.00	23.25
ATOM	1721	O	LYS	231	11.674	32.775	61.097	1.00	20.91
ATOM	1722	N	ASN	232	13.115	34.470	61.419	1.00	22.11

ATOM	1723	CA	ASN	232	14.238	33.617	61.775	1.00	22.68
ATOM	1724	CB	ASN	232	15.550	34.325	61.427	1.00	22.74
ATOM	1725	CG	ASN	232	16.770	33.476	61.711	1.00	22.28
ATOM	1726	OD1	ASN	232	16.710	32.519	62.477	1.00	22.05
ATOM	1727	ND2	ASN	232	17.897	33.839	61.103	1.00	21.01
ATOM	1728	C	ASN	232	14.157	33.363	63.283	1.00	22.41
ATOM	1729	O	ASN	232	14.442	34.256	64.083	1.00	22.40
ATOM	1730	N	PHE	233	13.754	32.158	63.670	1.00	20.06
ATOM	1731	CA	PHE	233	13.640	31.816	65.083	1.00	21.57
ATOM	1732	CB	PHE	233	12.623	30.692	65.284	1.00	20.88
ATOM	1733	CG	PHE	233	11.193	31.121	65.109	1.00	20.63
ATOM	1734	CD1	PHE	233	10.614	31.161	63.849	1.00	21.32
ATOM	1735	CD2	PHE	233	10.428	31.498	66.210	1.00	20.85
ATOM	1736	CE1	PHE	233	9.289	31.566	63.678	1.00	21.06
ATOM	1737	CE2	PHE	233	9.102	31.905	66.053	1.00	21.27
ATOM	1738	CZ	PHE	233	8.536	31.940	64.783	1.00	19.83
ATOM	1739	C	PHE	233	14.973	31.400	65.698	1.00	21.41
ATOM	1740	O	PHE	233	15.130	31.398	66.921	1.00	22.96
ATOM	1741	N	LEU	234	15.928	31.033	64.852	1.00	22.02
ATOM	1742	CA	LEU	234	17.242	30.622	65.328	1.00	24.52
ATOM	1743	CB	LEU	234	18.008	29.894	64.219	1.00	23.62
ATOM	1744	CG	LEU	234	19.465	29.538	64.524	1.00	22.78
ATOM	1745	CD1	LEU	234	19.527	28.580	65.701	1.00	21.54
ATOM	1746	CD2	LEU	234	20.112	28.923	63.292	1.00	25.26
ATOM	1747	C	LEU	234	18.045	31.838	65.773	1.00	26.95
ATOM	1748	O	LEU	234	18.727	31.801	66.796	1.00	25.49
ATOM	1749	N	ALA	235	17.958	32.911	64.996	1.00	30.52
ATOM	1750	CA	ALA	235	18.681	34.138	65.302	1.00	36.40
ATOM	1751	CB	ALA	235	18.274	35.239	64.331	1.00	37.16
ATOM	1752	C	ALA	235	18.417	34.578	66.736	1.00	40.32
ATOM	1753	O	ALA	235	19.337	34.973	67.454	1.00	40.96
ATOM	1754	N	GLU	236	17.154	34.501	67.145	1.00	43.98
ATOM	1755	CA	GLU	236	16.750	34.881	68.497	1.00	47.59
ATOM	1756	CB	GLU	236	15.280	34.514	68.730	1.00	48.96
ATOM	1757	CG	GLU	236	14.320	34.967	67.632	1.00	51.28
ATOM	1758	CD	GLU	236	14.177	36.477	67.544	1.00	52.90
ATOM	1759	OE1	GLU	236	15.174	37.159	67.224	1.00	53.61
ATOM	1760	OE2	GLU	236	13.063	36.984	67.798	1.00	53.70
ATOM	1761	C	GLU	236	17.625	34.138	69.502	1.00	48.66
ATOM	1762	O	GLU	236	18.234	34.748	70.380	1.00	49.42
ATOM	1763	N	THR	237	17.681	32.817	69.355	1.00	49.40
ATOM	1764	CA	THR	237	18.475	31.967	70.235	1.00	49.62
ATOM	1765	CB	THR	237	17.668	30.713	70.667	1.00	50.79
ATOM	1766	OG1	THR	237	18.464	29.900	71.542	1.00	52.05
ATOM	1767	CG2	THR	237	17.247	29.894	69.452	1.00	51.76
ATOM	1768	C	THR	237	19.772	31.529	69.548	1.00	48.44
ATOM	1769	O	THR	237	20.349	32.278	68.759	1.00	49.89
ATOM	1770	N	GLY	238	20.234	30.323	69.858	1.00	46.44
ATOM	1771	CA	GLY	238	21.451	29.819	69.248	1.00	42.67
ATOM	1772	C	GLY	238	21.379	28.318	69.059	1.00	41.05
ATOM	1773	O	GLY	238	22.385	27.663	68.790	1.00	41.30
ATOM	1774	N	ASP	239	20.174	27.776	69.194	1.00	37.96
ATOM	1775	CA	ASP	239	19.950	26.345	69.058	1.00	34.93
ATOM	1776	CB	ASP	239	19.748	25.735	70.449	1.00	38.61
ATOM	1777	CG	ASP	239	19.415	24.262	70.399	1.00	41.94
ATOM	1778	OD1	ASP	239	18.237	23.928	70.170	1.00	42.16
ATOM	1779	OD2	ASP	239	20.341	23.438	70.582	1.00	45.62
ATOM	1780	C	ASP	239	18.743	26.059	68.162	1.00	31.17
ATOM	1781	O	ASP	239	17.661	26.608	68.370	1.00	28.67
ATOM	1782	N	ILE	240	18.926	25.198	67.164	1.00	25.89
ATOM	1783	CA	ILE	240	17.834	24.882	66.252	1.00	22.33
ATOM	1784	CB	ILE	240	18.295	23.912	65.132	1.00	21.20
ATOM	1785	CG2	ILE	240	17.099	23.518	64.256	1.00	17.39
ATOM	1786	CG1	ILE	240	19.356	24.592	64.265	1.00	21.01
ATOM	1787	CD1	ILE	240	20.042	23.665	63.267	1.00	21.65
ATOM	1788	C	ILE	240	16.609	24.312	66.970	1.00	19.27
ATOM	1789	O	ILE	240	15.495	24.756	66.719	1.00	21.10
ATOM	1790	N	ARG	241	16.808	23.352	67.870	1.00	19.73
ATOM	1791	CA	ARG	241	15.687	22.761	68.592	1.00	19.91
ATOM	1792	CB	ARG	241	16.167	21.604	69.472	1.00	18.67
ATOM	1793	CG	ARG	241	16.544	20.366	68.659	1.00	19.80
ATOM	1794	CD	ARG	241	17.266	19.307	69.474	1.00	21.32
ATOM	1795	NE	ARG	241	17.484	18.087	68.692	1.00	22.98
ATOM	1796	CZ	ARG	241	18.334	17.979	67.675	1.00	24.19
ATOM	1797	NH1	ARG	241	19.068	19.018	67.302	1.00	25.28
ATOM	1798	NH2	ARG	241	18.444	16.830	67.018	1.00	24.38
ATOM	1799	C	ARG	241	14.964	23.806	69.427	1.00	20.32

ATOM	1800	O	ARG	241	13.727	23.803	69.520	1.00	19.66
ATOM	1801	N	ALA	242	15.730	24.707	70.034	1.00	19.52
ATOM	1802	CA	ALA	242	15.133	25.771	70.832	1.00	19.63
ATOM	1803	CB	ALA	242	16.227	26.580	71.524	1.00	20.26
ATOM	1804	C	ALA	242	14.312	26.662	69.896	1.00	19.55
ATOM	1805	O	ALA	242	13.233	27.133	70.267	1.00	21.30
ATOM	1806	N	ALA	243	14.804	26.874	68.676	1.00	18.14
ATOM	1807	CA	ALA	243	14.074	27.700	67.707	1.00	19.54
ATOM	1808	CB	ALA	243	14.928	27.944	66.457	1.00	18.09
ATOM	1809	C	ALA	243	12.748	27.031	67.326	1.00	19.51
ATOM	1810	O	ALA	243	11.731	27.701	67.180	1.00	20.19
ATOM	1811	N	VAL	244	12.769	25.710	67.157	1.00	21.10
ATOM	1812	CA	VAL	244	11.554	24.969	66.818	1.00	19.17
ATOM	1813	CB	VAL	244	11.842	23.457	66.632	1.00	18.81
ATOM	1814	CG1	VAL	244	10.536	22.668	66.538	1.00	18.20
ATOM	1815	CG2	VAL	244	12.671	23.245	65.361	1.00	17.47
ATOM	1816	C	VAL	244	10.521	25.146	67.927	1.00	20.06
ATOM	1817	O	VAL	244	9.336	25.348	67.660	1.00	19.30
ATOM	1818	N	ARG	245	10.972	25.073	69.174	1.00	21.06
ATOM	1819	CA	ARG	245	10.063	25.227	70.297	1.00	21.32
ATOM	1820	CB	ARG	245	10.780	24.907	71.615	1.00	21.31
ATOM	1821	CG	ARG	245	11.128	23.427	71.766	1.00	22.58
ATOM	1822	CD	ARG	245	11.472	23.053	73.209	1.00	25.04
ATOM	1823	NE	ARG	245	12.697	23.674	73.698	1.00	26.83
ATOM	1824	CZ	ARG	245	13.930	23.291	73.375	1.00	29.75
ATOM	1825	NH1	ARG	245	14.126	22.274	72.547	1.00	30.29
ATOM	1826	NH2	ARG	245	14.980	23.921	73.896	1.00	29.20
ATOM	1827	C	ARG	245	9.435	26.619	70.352	1.00	21.20
ATOM	1828	O	ARG	245	8.236	26.749	70.605	1.00	21.04
ATOM	1829	N	GLN	246	10.231	27.653	70.095	1.00	22.00
ATOM	1830	CA	GLN	246	9.730	29.024	70.122	1.00	23.64
ATOM	1831	CB	GLN	246	10.877	30.012	69.919	1.00	26.15
ATOM	1832	CG	GLN	246	10.464	31.464	70.076	1.00	29.62
ATOM	1833	CD	GLN	246	11.652	32.399	70.056	1.00	33.46
ATOM	1834	OE1	GLN	246	12.600	32.222	70.822	1.00	35.90
ATOM	1835	NE2	GLN	246	11.609	33.404	69.185	1.00	34.94
ATOM	1836	C	GLN	246	8.683	29.220	69.036	1.00	24.20
ATOM	1837	O	GLN	246	7.664	29.880	69.245	1.00	23.85
ATOM	1838	N	TYR	247	8.942	28.651	67.864	1.00	21.90
ATOM	1839	CA	TYR	247	7.999	28.751	66.761	1.00	21.66
ATOM	1840	CB	TYR	247	8.571	28.037	65.528	1.00	19.75
ATOM	1841	CG	TYR	247	7.579	27.795	64.419	1.00	20.83
ATOM	1842	CD1	TYR	247	6.815	28.837	63.899	1.00	19.45
ATOM	1843	CE1	TYR	247	5.892	28.612	62.885	1.00	21.16
ATOM	1844	CD2	TYR	247	7.398	26.517	63.891	1.00	21.25
ATOM	1845	CE2	TYR	247	6.480	26.281	62.876	1.00	21.03
ATOM	1846	CZ	TYR	247	5.729	27.327	62.378	1.00	20.70
ATOM	1847	OH	TYR	247	4.802	27.085	61.388	1.00	20.47
ATOM	1848	C	TYR	247	6.673	28.125	67.199	1.00	21.28
ATOM	1849	O	TYR	247	5.609	28.723	67.026	1.00	21.42
ATOM	1850	N	MET	248	6.746	26.929	67.782	1.00	20.26
ATOM	1851	CA	MET	248	5.556	26.219	68.258	1.00	21.53
ATOM	1852	CB	MET	248	5.951	24.872	68.884	1.00	21.82
ATOM	1853	CG	MET	248	6.426	23.815	67.882	1.00	21.90
ATOM	1854	SD	MET	248	7.248	22.415	68.688	1.00	26.67
ATOM	1855	CE	MET	248	5.858	21.537	69.370	1.00	24.87
ATOM	1856	C	MET	248	4.786	27.040	69.293	1.00	22.86
ATOM	1857	O	MET	248	3.554	27.155	69.231	1.00	21.83
ATOM	1858	N	ALA	249	5.518	27.606	70.247	1.00	21.40
ATOM	1859	CA	ALA	249	4.898	28.405	71.299	1.00	21.90
ATOM	1860	CB	ALA	249	5.926	28.738	72.369	1.00	21.23
ATOM	1861	C	ALA	249	4.252	29.687	70.778	1.00	21.43
ATOM	1862	O	ALA	249	3.099	29.979	71.105	1.00	22.72
ATOM	1863	N	GLU	250	4.989	30.448	69.970	1.00	22.09
ATOM	1864	CA	GLU	250	4.469	31.707	69.433	1.00	23.27
ATOM	1865	CB	GLU	250	5.549	32.454	68.649	1.00	22.04
ATOM	1866	CG	GLU	250	6.815	32.693	69.442	1.00	24.15
ATOM	1867	CD	GLU	250	7.629	33.860	68.923	1.00	24.35
ATOM	1868	OE1	GLU	250	7.549	34.169	67.719	1.00	25.60
ATOM	1869	OE2	GLU	250	8.362	34.464	69.729	1.00	25.39
ATOM	1870	C	GLU	250	3.231	31.538	68.558	1.00	25.21
ATOM	1871	O	GLU	250	2.406	32.454	68.449	1.00	24.11
ATOM	1872	N	VAL	251	3.093	30.376	67.930	1.00	24.87
ATOM	1873	CA	VAL	251	1.927	30.135	67.094	1.00	24.81
ATOM	1874	CB	VAL	251	2.114	28.886	66.198	1.00	23.31
ATOM	1875	CG1	VAL	251	0.827	28.605	65.431	1.00	22.66
ATOM	1876	CG2	VAL	251	3.260	29.108	65.234	1.00	23.33

ATOM	1877	C	VAL	251	0.693	29.927	67.970	1.00	25.72
ATOM	1878	O	VAL	251	-0.355	30.524	67.731	1.00	26.34
ATOM	1879	N	GLU	252	0.825	29.085	68.990	1.00	25.88
ATOM	1880	CA	GLU	252	-0.291	28.804	69.885	1.00	28.97
ATOM	1881	CB	GLU	252	0.066	27.667	70.842	1.00	31.63
ATOM	1882	CG	GLU	252	-1.076	27.268	71.762	1.00	35.49
ATOM	1883	CD	GLU	252	-0.739	26.078	72.633	1.00	38.81
ATOM	1884	OE1	GLU	252	-1.557	25.730	73.513	1.00	41.32
ATOM	1885	OE2	GLU	252	0.343	25.486	72.438	1.00	40.57
ATOM	1886	C	GLU	252	-0.713	30.026	70.686	1.00	29.30
ATOM	1887	O	GLU	252	-1.872	30.142	71.082	1.00	28.02
ATOM	1888	N	SER	253	0.233	30.930	70.922	1.00	30.46
ATOM	1889	CA	SER	253	-0.038	32.148	71.681	1.00	32.50
ATOM	1890	CB	SER	253	1.209	32.572	72.450	1.00	32.17
ATOM	1891	OG	SER	253	1.459	31.671	73.519	1.00	39.52
ATOM	1892	C	SER	253	-0.497	33.302	70.794	1.00	31.92
ATOM	1893	O	SER	253	-1.051	34.288	71.283	1.00	32.17
ATOM	1894	N	GLY	254	-0.264	33.178	69.492	1.00	30.27
ATOM	1895	CA	GLY	254	-0.665	34.227	68.571	1.00	27.52
ATOM	1896	C	GLY	254	0.429	35.249	68.330	1.00	26.04
ATOM	1897	O	GLY	254	0.259	36.178	67.541	1.00	28.43
ATOM	1898	N	VAL	255	1.556	35.083	69.013	1.00	25.10
ATOM	1899	CA	VAL	255	2.678	35.998	68.861	1.00	24.43
ATOM	1900	CB	VAL	255	3.806	35.637	69.836	1.00	24.55
ATOM	1901	CG1	VAL	255	5.016	36.530	69.601	1.00	25.47
ATOM	1902	CG2	VAL	255	3.299	35.782	71.264	1.00	27.69
ATOM	1903	C	VAL	255	3.209	35.966	67.433	1.00	23.67
ATOM	1904	O	VAL	255	3.667	36.981	66.901	1.00	21.95
ATOM	1905	N	TYR	256	3.155	34.786	66.821	1.00	24.22
ATOM	1906	CA	TYR	256	3.597	34.614	65.441	1.00	22.81
ATOM	1907	CB	TYR	256	4.856	33.739	65.356	1.00	22.52
ATOM	1908	CG	TYR	256	5.361	33.602	63.935	1.00	22.38
ATOM	1909	CD1	TYR	256	6.061	34.644	63.320	1.00	22.41
ATOM	1910	CE1	TYR	256	6.436	34.574	61.975	1.00	23.46
ATOM	1911	CD2	TYR	256	5.053	32.473	63.171	1.00	23.14
ATOM	1912	CE2	TYR	256	5.419	32.388	61.825	1.00	22.31
ATOM	1913	CZ	TYR	256	6.108	33.443	61.234	1.00	25.45
ATOM	1914	OH	TYR	256	6.448	33.378	59.894	1.00	23.06
ATOM	1915	C	TYR	256	2.476	33.950	64.645	1.00	22.89
ATOM	1916	O	TYR	256	1.860	32.995	65.107	1.00	20.80
ATOM	1917	N	PRO	257	2.188	34.465	63.441	1.00	23.79
ATOM	1918	CD	PRO	257	1.258	33.861	62.468	1.00	25.59
ATOM	1919	CA	PRO	257	2.886	35.611	62.854	1.00	25.56
ATOM	1920	CB	PRO	257	2.485	35.542	61.379	1.00	26.50
ATOM	1921	CG	PRO	257	1.128	34.947	61.427	1.00	26.66
ATOM	1922	C	PRO	257	2.489	36.934	63.513	1.00	26.91
ATOM	1923	O	PRO	257	1.382	37.074	64.027	1.00	26.07
ATOM	1924	N	GLY	258	3.412	37.889	63.501	1.00	28.06
ATOM	1925	CA	GLY	258	3.141	39.182	64.092	1.00	31.45
ATOM	1926	C	GLY	258	2.550	40.108	63.052	1.00	33.08
ATOM	1927	O	GLY	258	2.454	39.750	61.875	1.00	31.82
ATOM	1928	N	GLU	259	2.153	41.301	63.476	1.00	33.88
ATOM	1929	CA	GLU	259	1.571	42.259	62.554	1.00	35.72
ATOM	1930	CB	GLU	259	1.118	43.513	63.304	1.00	37.56
ATOM	1931	CG	GLU	259	0.153	44.376	62.519	1.00	40.03
ATOM	1932	CD	GLU	259	-1.186	43.695	62.296	1.00	42.11
ATOM	1933	OE1	GLU	259	-2.009	44.237	61.534	1.00	45.27
ATOM	1934	OE2	GLU	259	-1.421	42.620	62.886	1.00	44.73
ATOM	1935	C	GLU	259	2.606	42.629	61.498	1.00	36.27
ATOM	1936	O	GLU	259	2.258	43.046	60.391	1.00	38.03
ATOM	1937	N	GLU	260	3.881	42.468	61.844	1.00	36.02
ATOM	1938	CA	GLU	260	4.976	42.780	60.930	1.00	36.42
ATOM	1939	CB	GLU	260	6.318	42.804	61.673	1.00	39.45
ATOM	1940	CG	GLU	260	6.264	43.354	63.087	1.00	43.52
ATOM	1941	CD	GLU	260	5.723	42.347	64.088	1.00	46.00
ATOM	1942	OE1	GLU	260	6.384	41.306	64.306	1.00	47.00
ATOM	1943	OE2	GLU	260	4.637	42.596	64.656	1.00	46.44
ATOM	1944	C	GLU	260	5.057	41.724	59.836	1.00	35.35
ATOM	1945	O	GLU	260	5.677	41.940	58.797	1.00	34.80
ATOM	1946	N	HIS	261	4.434	40.577	60.084	1.00	34.70
ATOM	1947	CA	HIS	261	4.448	39.471	59.132	1.00	34.15
ATOM	1948	CB	HIS	261	4.760	38.164	59.857	1.00	32.10
ATOM	1949	CG	HIS	261	6.004	38.213	60.687	1.00	31.51
ATOM	1950	CD2	HIS	261	6.200	38.019	62.013	1.00	29.70
ATOM	1951	ND1	HIS	261	7.249	38.460	60.149	1.00	30.98
ATOM	1952	CE1	HIS	261	8.158	38.411	61.106	1.00	28.80
ATOM	1953	NE2	HIS	261	7.548	38.145	62.246	1.00	28.77

ATOM	1954	C	HIS	261	3.110	39.330	58.424	1.00	35.41
ATOM	1955	O	HIS	261	2.912	38.408	57.631	1.00	35.55
ATOM	1956	N	SER	262	2.195	40.248	58.716	1.00	35.97
ATOM	1957	CA	SER	262	0.864	40.226	58.133	1.00	36.99
ATOM	1958	CB	SER	262	-0.173	40.483	59.227	1.00	35.31
ATOM	1959	OG	SER	262	-0.052	39.540	60.279	1.00	37.80
ATOM	1960	C	SER	262	0.703	41.254	57.014	1.00	38.31
ATOM	1961	O	SER	262	1.483	42.203	56.909	1.00	37.66
ATOM	1962	N	PHE	263	-0.312	41.050	56.178	1.00	40.01
ATOM	1963	CA	PHE	263	-0.600	41.955	55.066	1.00	41.82
ATOM	1964	CB	PHE	263	-0.434	41.243	53.718	1.00	42.58
ATOM	1965	CG	PHE	263	0.969	40.797	53.429	1.00	43.74
ATOM	1966	CD1	PHE	263	1.306	39.447	53.467	1.00	43.83
ATOM	1967	CD2	PHE	263	1.954	41.727	53.110	1.00	44.25
ATOM	1968	CE1	PHE	263	2.605	39.029	53.190	1.00	44.88
ATOM	1969	CE2	PHE	263	3.254	41.322	52.832	1.00	45.05
ATOM	1970	CZ	PHE	263	3.583	39.970	52.871	1.00	45.70
ATOM	1971	C	PHE	263	-2.026	42.482	55.169	1.00	42.76
ATOM	1972	O	PHE	263	-2.827	41.984	55.961	1.00	41.84
ATOM	1973	N	HIS	264	-2.333	43.491	54.359	1.00	44.75
ATOM	1974	CA	HIS	264	-3.661	44.102	54.336	1.00	47.39
ATOM	1975	CB	HIS	264	-3.719	45.285	55.303	1.00	48.50
ATOM	1976	CG	HIS	264	-3.536	44.897	56.735	1.00	49.55
ATOM	1977	CD2	HIS	264	-2.580	45.229	57.635	1.00	49.70
ATOM	1978	ND1	HIS	264	-4.394	44.037	57.386	1.00	49.75
ATOM	1979	CE1	HIS	264	-3.973	43.854	58.625	1.00	50.24
ATOM	1980	NE2	HIS	264	-2.874	44.565	58.801	1.00	49.74
ATOM	1981	C	HIS	264	-4.020	44.576	52.931	1.00	47.60
ATOM	1982	O	HIS	264	-5.144	44.275	52.483	1.00	48.91
ATOM	1983	OXT	HIS	264	-3.178	45.249	52.302	1.00	48.36
ATOM	1984	C1	KPL	265	5.087	27.716	51.358	1.00	41.50
ATOM	1985	C2	KPL	265	4.190	26.479	51.578	1.00	40.60
ATOM	1986	C3	KPL	265	4.654	25.755	52.846	1.00	39.94
ATOM	1987	C4	KPL	265	2.727	26.938	51.779	1.00	41.78
ATOM	1988	O1	KPL	265	2.243	27.630	50.619	1.00	43.47
ATOM	1989	C5	KPL	265	4.309	25.525	50.360	1.00	40.08
ATOM	1990	O2	KPL	265	3.322	25.239	49.713	1.00	38.16
ATOM	1991	C6	KPL	265	5.636	24.923	49.944	1.00	39.07
ATOM	1992	O3	KPL	265	6.653	25.170	50.562	1.00	40.08
ATOM	1993	O4	KPL	265	5.695	24.104	48.874	1.00	38.37
ATOM	1994	CB	MET	301	16.154	43.498	31.231	1.00	80.41
ATOM	1995	CG	MET	301	15.177	44.253	30.325	1.00	81.85
ATOM	1996	SD	MET	301	13.933	45.244	31.185	1.00	84.34
ATOM	1997	CE	MET	301	12.458	44.235	30.946	1.00	83.29
ATOM	1998	C	MET	301	14.844	42.880	33.290	1.00	78.13
ATOM	1999	O	MET	301	15.030	44.035	33.680	1.00	78.18
ATOM	2000	N	MET	301	14.641	41.532	31.184	1.00	78.62
ATOM	2001	CA	MET	301	15.549	42.343	32.045	1.00	78.92
ATOM	2002	N	LYS	302	14.042	42.021	33.914	1.00	76.63
ATOM	2003	CA	LYS	302	13.300	42.378	35.118	1.00	75.10
ATOM	2004	CB	LYS	302	11.941	42.982	34.740	1.00	75.44
ATOM	2005	CG	LYS	302	11.997	44.455	34.355	1.00	75.76
ATOM	2006	CD	LYS	302	12.271	45.330	35.571	1.00	75.67
ATOM	2007	CE	LYS	302	11.149	45.212	36.594	1.00	75.44
ATOM	2008	NZ	LYS	302	11.411	46.017	37.817	1.00	75.82
ATOM	2009	C	LYS	302	13.091	41.203	36.082	1.00	73.54
ATOM	2010	O	LYS	302	13.159	41.380	37.300	1.00	74.12
ATOM	2011	N	PRO	303	12.847	39.987	35.554	1.00	71.41
ATOM	2012	CD	PRO	303	12.659	38.812	36.425	1.00	70.80
ATOM	2013	CA	PRO	303	12.743	39.596	34.143	1.00	69.04
ATOM	2014	CB	PRO	303	12.752	38.074	34.213	1.00	69.91
ATOM	2015	CG	PRO	303	12.025	37.812	35.486	1.00	70.53
ATOM	2016	C	PRO	303	11.499	40.136	33.444	1.00	66.77
ATOM	2017	O	PRO	303	10.485	40.417	34.083	1.00	66.86
ATOM	2018	N	THR	304	11.588	40.276	32.127	1.00	64.02
ATOM	2019	CA	THR	304	10.474	40.781	31.337	1.00	61.28
ATOM	2020	CB	THR	304	10.830	40.818	29.842	1.00	61.21
ATOM	2021	OG1	THR	304	12.085	41.486	29.668	1.00	60.91
ATOM	2022	CG2	THR	304	9.756	41.560	29.062	1.00	60.88
ATOM	2023	C	THR	304	9.247	39.897	31.525	1.00	59.60
ATOM	2024	O	THR	304	9.357	38.673	31.563	1.00	59.05
ATOM	2025	N	THR	305	8.079	40.522	31.644	1.00	57.62
ATOM	2026	CA	THR	305	6.836	39.783	31.829	1.00	55.83
ATOM	2027	CB	THR	305	6.207	40.074	33.204	1.00	55.66
ATOM	2028	OG1	THR	305	5.873	41.465	33.293	1.00	55.27
ATOM	2029	CG2	THR	305	7.176	39.713	34.317	1.00	55.55
ATOM	2030	C	THR	305	5.810	40.133	30.758	1.00	55.15

ATOM	2031	O	THR	305	5.968	41.108	30.020	1.00	54.85
ATOM	2032	N	ILE	306	4.756	39.328	30.680	1.00	54.30
ATOM	2033	CA	ILE	306	3.698	39.543	29.704	1.00	54.29
ATOM	2034	CB	ILE	306	2.606	38.462	29.821	1.00	54.32
ATOM	2035	CG2	ILE	306	1.645	38.567	28.644	1.00	54.60
ATOM	2036	CG1	ILE	306	3.249	37.074	29.846	1.00	54.90
ATOM	2037	CD1	ILE	306	2.276	35.949	30.142	1.00	55.32
ATOM	2038	C	ILE	306	3.061	40.905	29.940	1.00	54.16
ATOM	2039	O	ILE	306	2.648	41.584	28.999	1.00	53.93
ATOM	2040	N	SER	307	2.990	41.299	31.208	1.00	53.96
ATOM	2041	CA	SER	307	2.402	42.579	31.588	1.00	54.22
ATOM	2042	CB	SER	307	2.523	42.777	33.101	1.00	54.20
ATOM	2043	OG	SER	307	1.851	41.744	33.801	1.00	55.29
ATOM	2044	C	SER	307	3.064	43.745	30.855	1.00	53.77
ATOM	2045	O	SER	307	2.383	44.653	30.379	1.00	54.19
ATOM	2046	N	LEU	308	4.392	43.712	30.770	1.00	53.02
ATOM	2047	CA	LEU	308	5.142	44.761	30.092	1.00	53.53
ATOM	2048	CB	LEU	308	6.630	44.411	30.049	1.00	53.40
ATOM	2049	CG	LEU	308	7.434	44.783	31.295	1.00	54.50
ATOM	2050	CD1	LEU	308	8.837	44.205	31.202	1.00	54.63
ATOM	2051	CD2	LEU	308	7.487	46.304	31.424	1.00	54.20
ATOM	2052	C	LEU	308	4.631	44.988	28.676	1.00	53.65
ATOM	2053	O	LEU	308	4.355	46.120	28.277	1.00	53.25
ATOM	2054	N	LEU	309	4.509	43.905	27.917	1.00	53.27
ATOM	2055	CA	LEU	309	4.024	43.990	26.549	1.00	53.60
ATOM	2056	CB	LEU	309	3.994	42.599	25.914	1.00	53.39
ATOM	2057	CG	LEU	309	5.336	41.872	25.803	1.00	53.15
ATOM	2058	CD1	LEU	309	5.108	40.469	25.271	1.00	52.80
ATOM	2059	CD2	LEU	309	6.272	42.646	24.890	1.00	52.50
ATOM	2060	C	LEU	309	2.625	44.598	26.530	1.00	53.99
ATOM	2061	O	LEU	309	2.312	45.429	25.677	1.00	53.60
ATOM	2062	N	GLN	310	1.790	44.182	27.479	1.00	54.06
ATOM	2063	CA	GLN	310	0.425	44.685	27.576	1.00	55.21
ATOM	2064	CB	GLN	310	-0.319	43.979	28.716	1.00	55.07
ATOM	2065	CG	GLN	310	-1.810	44.283	28.790	1.00	55.61
ATOM	2066	CD	GLN	310	-2.577	43.772	27.581	1.00	56.41
ATOM	2067	OE1	GLN	310	-2.395	44.254	26.463	1.00	56.40
ATOM	2068	NE2	GLN	310	-3.438	42.784	27.803	1.00	57.08
ATOM	2069	C	GLN	310	0.441	46.192	27.824	1.00	56.02
ATOM	2070	O	GLN	310	-0.263	46.949	27.153	1.00	56.00
ATOM	2071	N	LYS	311	1.252	46.620	28.786	1.00	56.45
ATOM	2072	CA	LYS	311	1.366	48.036	29.121	1.00	57.85
ATOM	2073	CB	LYS	311	2.361	48.236	30.266	1.00	58.44
ATOM	2074	CG	LYS	311	2.419	49.668	30.777	1.00	59.71
ATOM	2075	CD	LYS	311	3.851	50.156	30.939	1.00	60.00
ATOM	2076	CE	LYS	311	4.611	49.364	31.989	1.00	60.14
ATOM	2077	NZ	LYS	311	6.013	49.849	32.114	1.00	59.97
ATOM	2078	C	LYS	311	1.829	48.836	27.906	1.00	57.84
ATOM	2079	O	LYS	311	1.341	49.938	27.654	1.00	57.02
ATOM	2080	N	TYR	312	2.774	48.269	27.160	1.00	58.58
ATOM	2081	CA	TYR	312	3.316	48.913	25.970	1.00	59.79
ATOM	2082	CB	TYR	312	4.369	48.014	25.314	1.00	60.90
ATOM	2083	CG	TYR	312	5.642	47.839	26.119	1.00	62.17
ATOM	2084	CD1	TYR	312	6.639	46.960	25.695	1.00	62.63
ATOM	2085	CE1	TYR	312	7.818	46.799	26.424	1.00	63.39
ATOM	2086	CD2	TYR	312	5.855	48.557	27.297	1.00	62.71
ATOM	2087	CE2	TYR	312	7.030	48.404	28.033	1.00	63.56
ATOM	2088	CZ	TYR	312	8.006	47.523	27.590	1.00	63.51
ATOM	2089	OH	TYR	312	9.170	47.369	28.311	1.00	63.95
ATOM	2090	C	TYR	312	2.230	49.243	24.954	1.00	60.36
ATOM	2091	O	TYR	312	2.287	50.279	24.289	1.00	60.60
ATOM	2092	N	LYS	313	1.244	48.360	24.830	1.00	60.33
ATOM	2093	CA	LYS	313	0.155	48.579	23.887	1.00	60.59
ATOM	2094	CB	LYS	313	-0.720	47.324	23.773	1.00	59.68
ATOM	2095	CG	LYS	313	-1.855	47.466	22.766	1.00	59.36
ATOM	2096	CD	LYS	313	-2.535	46.141	22.466	1.00	57.36
ATOM	2097	CE	LYS	313	-3.587	46.318	21.377	1.00	57.43
ATOM	2098	NZ	LYS	313	-4.149	45.027	20.902	1.00	57.01
ATOM	2099	C	LYS	313	-0.689	49.771	24.330	1.00	60.98
ATOM	2100	O	LYS	313	-1.155	50.558	23.505	1.00	60.46
ATOM	2101	N	GLN	314	-0.876	49.903	25.638	1.00	61.89
ATOM	2102	CA	GLN	314	-1.656	51.004	26.186	1.00	63.46
ATOM	2103	CB	GLN	314	-1.968	50.747	27.661	1.00	63.34
ATOM	2104	CG	GLN	314	-2.812	49.507	27.898	1.00	64.06
ATOM	2105	CD	GLN	314	-3.090	49.266	29.366	1.00	64.42
ATOM	2106	OE1	GLN	314	-3.675	50.108	30.047	1.00	64.71
ATOM	2107	NE2	GLN	314	-2.672	48.110	29.862	1.00	64.63

ATOM	2108	C	GLN	314	-0.890	52.313	26.040	1.00	64.13
ATOM	2109	O	GLN	314	-1.399	53.383	26.378	1.00	65.09
ATOM	2110	N	GLU	315	0.336	52.217	25.533	1.00	64.44
ATOM	2111	CA	GLU	315	1.186	53.386	25.332	1.00	64.89
ATOM	2112	CB	GLU	315	2.476	53.254	26.149	1.00	65.03
ATOM	2113	CG	GLU	315	2.250	53.017	27.632	1.00	65.70
ATOM	2114	CD	GLU	315	3.548	52.910	28.407	1.00	65.91
ATOM	2115	OE1	GLU	315	4.414	52.101	28.013	1.00	66.19
ATOM	2116	OE2	GLU	315	3.702	53.631	29.414	1.00	66.44
ATOM	2117	C	GLU	315	1.532	53.541	23.855	1.00	64.71
ATOM	2118	O	GLU	315	2.323	54.408	23.480	1.00	64.82
ATOM	2119	N	LYS	316	0.938	52.692	23.023	1.00	64.19
ATOM	2120	CA	LYS	316	1.176	52.731	21.585	1.00	64.21
ATOM	2121	CB	LYS	316	0.604	54.024	20.997	1.00	64.07
ATOM	2122	CG	LYS	316	-0.840	54.306	21.387	1.00	64.10
ATOM	2123	CD	LYS	316	-1.794	53.259	20.837	1.00	63.85
ATOM	2124	CE	LYS	316	-3.220	53.514	21.306	1.00	63.79
ATOM	2125	NZ	LYS	316	-3.703	54.874	20.934	1.00	63.74
ATOM	2126	C	LYS	316	2.671	52.643	21.276	1.00	64.35
ATOM	2127	O	LYS	316	3.157	53.260	20.327	1.00	64.34
ATOM	2128	N	LYS	317	3.395	51.876	22.087	1.00	64.27
ATOM	2129	CA	LYS	317	4.835	51.702	21.907	1.00	63.70
ATOM	2130	CB	LYS	317	5.553	51.810	23.257	1.00	64.31
ATOM	2131	CG	LYS	317	7.061	51.596	23.178	1.00	65.23
ATOM	2132	CD	LYS	317	7.689	51.451	24.560	1.00	65.71
ATOM	2133	CE	LYS	317	7.548	52.720	25.387	1.00	66.37
ATOM	2134	NZ	LYS	317	8.145	52.562	26.744	1.00	66.68
ATOM	2135	C	LYS	317	5.157	50.349	21.273	1.00	62.73
ATOM	2136	O	LYS	317	5.221	49.331	21.964	1.00	62.19
ATOM	2137	N	ARG	318	5.361	50.342	19.959	1.00	61.20
ATOM	2138	CA	ARG	318	5.682	49.109	19.250	1.00	59.98
ATOM	2139	CB	ARG	318	5.760	49.370	17.743	1.00	60.40
ATOM	2140	CG	ARG	318	4.416	49.244	17.040	1.00	61.29
ATOM	2141	CD	ARG	318	4.469	49.737	15.604	1.00	61.24
ATOM	2142	NE	ARG	318	4.450	51.196	15.528	1.00	62.30
ATOM	2143	CZ	ARG	318	4.415	51.885	14.392	1.00	62.88
ATOM	2144	NH1	ARG	318	4.397	51.249	13.227	1.00	62.95
ATOM	2145	NH2	ARG	318	4.391	53.211	14.421	1.00	62.95
ATOM	2146	C	ARG	318	6.990	48.507	19.754	1.00	58.84
ATOM	2147	O	ARG	318	8.024	49.174	19.780	1.00	58.27
ATOM	2148	N	PHE	319	6.928	47.241	20.156	1.00	57.39
ATOM	2149	CA	PHE	319	8.089	46.530	20.677	1.00	55.69
ATOM	2150	CB	PHE	319	7.725	45.856	22.005	1.00	56.21
ATOM	2151	CG	PHE	319	6.465	45.036	21.945	1.00	56.77
ATOM	2152	CD1	PHE	319	6.465	43.768	21.368	1.00	56.74
ATOM	2153	CD2	PHE	319	5.270	45.543	22.448	1.00	56.37
ATOM	2154	CE1	PHE	319	5.291	43.018	21.294	1.00	57.23
ATOM	2155	CE2	PHE	319	4.092	44.803	22.379	1.00	56.83
ATOM	2156	CZ	PHE	319	4.101	43.539	21.801	1.00	56.54
ATOM	2157	C	PHE	319	8.632	45.497	19.692	1.00	54.04
ATOM	2158	O	PHE	319	7.932	45.063	18.776	1.00	53.79
ATOM	2159	N	ALA	320	9.887	45.106	19.890	1.00	51.83
ATOM	2160	CA	ALA	320	10.527	44.135	19.013	1.00	49.46
ATOM	2161	CB	ALA	320	11.880	44.665	18.562	1.00	49.67
ATOM	2162	C	ALA	320	10.695	42.773	19.676	1.00	47.51
ATOM	2163	O	ALA	320	10.899	42.677	20.886	1.00	47.41
ATOM	2164	N	THR	321	10.607	41.721	18.869	1.00	45.20
ATOM	2165	CA	THR	321	10.755	40.355	19.357	1.00	43.60
ATOM	2166	CB	THR	321	9.383	39.692	19.579	1.00	43.59
ATOM	2167	OG1	THR	321	8.618	40.472	20.506	1.00	44.19
ATOM	2168	CG2	THR	321	9.553	38.293	20.132	1.00	44.04
ATOM	2169	C	THR	321	11.536	39.542	18.331	1.00	41.76
ATOM	2170	O	THR	321	11.456	39.804	17.130	1.00	41.89
ATOM	2171	N	ILE	322	12.290	38.551	18.798	1.00	40.55
ATOM	2172	CA	ILE	322	13.077	37.729	17.887	1.00	38.74
ATOM	2173	CB	ILE	322	14.479	38.338	17.688	1.00	39.69
ATOM	2174	CG2	ILE	322	15.310	38.150	18.954	1.00	38.21
ATOM	2175	CG1	ILE	322	15.160	37.692	16.479	1.00	39.62
ATOM	2176	CD1	ILE	322	16.436	38.388	16.055	1.00	40.64
ATOM	2177	C	ILE	322	13.220	36.289	18.375	1.00	37.51
ATOM	2178	O	ILE	322	13.037	36.005	19.557	1.00	36.20
ATOM	2179	N	THR	323	13.544	35.381	17.458	1.00	35.23
ATOM	2180	CA	THR	323	13.718	33.980	17.817	1.00	33.67
ATOM	2181	CB	THR	323	13.381	33.034	16.640	1.00	33.56
ATOM	2182	OG1	THR	323	14.346	33.202	15.596	1.00	33.89
ATOM	2183	CG2	THR	323	11.996	33.331	16.096	1.00	34.18
ATOM	2184	C	THR	323	15.158	33.717	18.244	1.00	31.77

ATOM	2185	O	THR	323	16.071	34.459	17.879	1.00	30.93
ATOM	2186	N	ALA	324	15.345	32.661	19.033	1.00	30.73
ATOM	2187	CA	ALA	324	16.662	32.257	19.518	1.00	27.91
ATOM	2188	CB	ALA	324	17.022	33.025	20.783	1.00	29.81
ATOM	2189	C	ALA	324	16.618	30.758	19.800	1.00	28.38
ATOM	2190	O	ALA	324	15.618	30.247	20.312	1.00	26.39
ATOM	2191	N	TYR	325	17.703	30.059	19.472	1.00	27.03
ATOM	2192	CA	TYR	325	17.759	28.616	19.663	1.00	27.26
ATOM	2193	CB	TYR	325	17.603	27.909	18.315	1.00	25.23
ATOM	2194	CG	TYR	325	16.645	28.596	17.372	1.00	24.94
ATOM	2195	CD1	TYR	325	17.109	29.501	16.417	1.00	23.93
ATOM	2196	CE1	TYR	325	16.234	30.125	15.533	1.00	25.04
ATOM	2197	CD2	TYR	325	15.275	28.336	17.427	1.00	23.23
ATOM	2198	CE2	TYR	325	14.392	28.954	16.552	1.00	22.55
ATOM	2199	CZ	TYR	325	14.876	29.845	15.606	1.00	24.69
ATOM	2200	OH	TYR	325	14.003	30.434	14.723	1.00	25.39
ATOM	2201	C	TYR	325	19.038	28.131	20.333	1.00	27.49
ATOM	2202	O	TYR	325	19.287	26.931	20.400	1.00	28.39
ATOM	2203	N	ASP	326	19.854	29.052	20.827	1.00	27.48
ATOM	2204	CA	ASP	326	21.082	28.647	21.488	1.00	27.27
ATOM	2205	CB	ASP	326	22.182	28.392	20.453	1.00	26.92
ATOM	2206	CG	ASP	326	22.645	29.661	19.767	1.00	27.37
ATOM	2207	OD1	ASP	326	23.394	30.439	20.397	1.00	28.68
ATOM	2208	OD2	ASP	326	22.253	29.881	18.603	1.00	28.94
ATOM	2209	C	ASP	326	21.541	29.677	22.510	1.00	28.59
ATOM	2210	O	ASP	326	20.991	30.773	22.593	1.00	30.01
ATOM	2211	N	TYR	327	22.547	29.302	23.289	1.00	28.76
ATOM	2212	CA	TYR	327	23.106	30.152	24.332	1.00	30.47
ATOM	2213	CB	TYR	327	24.203	29.385	25.073	1.00	31.91
ATOM	2214	CG	TYR	327	24.997	30.215	26.057	1.00	35.27
ATOM	2215	CD1	TYR	327	24.465	30.562	27.300	1.00	36.04
ATOM	2216	CE1	TYR	327	25.196	31.331	28.209	1.00	37.29
ATOM	2217	CD2	TYR	327	26.281	30.658	25.744	1.00	35.38
ATOM	2218	CE2	TYR	327	27.018	31.427	26.643	1.00	36.93
ATOM	2219	CZ	TYR	327	26.472	31.759	27.869	1.00	37.24
ATOM	2220	OH	TYR	327	27.198	32.521	28.755	1.00	37.97
ATOM	2221	C	TYR	327	23.677	31.461	23.793	1.00	30.48
ATOM	2222	O	TYR	327	23.216	32.543	24.148	1.00	29.09
ATOM	2223	N	SER	328	24.685	31.347	22.935	1.00	31.30
ATOM	2224	CA	SER	328	25.350	32.509	22.364	1.00	31.80
ATOM	2225	CB	SER	328	26.252	32.077	21.208	1.00	31.10
ATOM	2226	OG	SER	328	27.287	31.231	21.685	1.00	31.34
ATOM	2227	C	SER	328	24.411	33.620	21.905	1.00	33.46
ATOM	2228	O	SER	328	24.409	34.712	22.478	1.00	35.08
ATOM	2229	N	PHE	329	23.608	33.353	20.882	1.00	33.75
ATOM	2230	CA	PHE	329	22.695	34.373	20.380	1.00	35.28
ATOM	2231	CB	PHE	329	21.957	33.876	19.134	1.00	36.14
ATOM	2232	CG	PHE	329	22.794	33.915	17.884	1.00	37.89
ATOM	2233	CD1	PHE	329	23.396	32.760	17.391	1.00	37.32
ATOM	2234	CD2	PHE	329	22.995	35.117	17.207	1.00	37.37
ATOM	2235	CE1	PHE	329	24.185	32.803	16.243	1.00	37.40
ATOM	2236	CE2	PHE	329	23.781	35.169	16.061	1.00	37.67
ATOM	2237	CZ	PHE	329	24.378	34.011	15.576	1.00	38.05
ATOM	2238	C	PHE	329	21.691	34.872	21.415	1.00	36.35
ATOM	2239	O	PHE	329	21.294	36.040	21.387	1.00	35.47
ATOM	2240	N	ALA	330	21.282	33.997	22.328	1.00	36.19
ATOM	2241	CA	ALA	330	20.329	34.382	23.363	1.00	37.22
ATOM	2242	CB	ALA	330	19.929	33.159	24.187	1.00	37.12
ATOM	2243	C	ALA	330	20.930	35.453	24.275	1.00	38.43
ATOM	2244	O	ALA	330	20.284	36.456	24.587	1.00	36.62
ATOM	2245	N	LYS	331	22.169	35.224	24.703	1.00	40.16
ATOM	2246	CA	LYS	331	22.877	36.150	25.583	1.00	42.64
ATOM	2247	CB	LYS	331	24.239	35.560	25.970	1.00	43.34
ATOM	2248	CG	LYS	331	25.056	36.401	26.947	1.00	45.59
ATOM	2249	CD	LYS	331	24.494	36.320	28.362	1.00	48.66
ATOM	2250	CE	LYS	331	25.388	37.032	29.378	1.00	48.88
ATOM	2251	NZ	LYS	331	25.439	38.510	29.177	1.00	50.22
ATOM	2252	C	LYS	331	23.084	37.497	24.892	1.00	42.88
ATOM	2253	O	LYS	331	23.000	38.554	25.520	1.00	44.09
ATOM	2254	N	LEU	332	23.351	37.446	23.594	1.00	43.08
ATOM	2255	CA	LEU	332	23.588	38.645	22.807	1.00	42.72
ATOM	2256	CB	LEU	332	24.020	38.249	21.393	1.00	42.60
ATOM	2257	CG	LEU	332	24.502	39.350	20.447	1.00	42.52
ATOM	2258	CD1	LEU	332	25.490	38.763	19.448	1.00	41.43
ATOM	2259	CD2	LEU	332	23.315	39.981	19.740	1.00	42.66
ATOM	2260	C	LEU	332	22.372	39.565	22.754	1.00	43.40
ATOM	2261	O	LEU	332	22.488	40.770	22.980	1.00	42.27

ATOM	2262	N	PHE	333	21.204	39.004	22.463	1.00	42.78
ATOM	2263	CA	PHE	333	19.997	39.814	22.387	1.00	43.66
ATOM	2264	CB	PHE	333	18.818	38.983	21.880	1.00	43.29
ATOM	2265	CG	PHE	333	19.080	38.289	20.580	1.00	43.11
ATOM	2266	CD1	PHE	333	19.750	38.942	19.548	1.00	42.14
ATOM	2267	CD2	PHE	333	18.640	36.986	20.379	1.00	42.92
ATOM	2268	CE1	PHE	333	19.977	38.306	18.334	1.00	42.67
ATOM	2269	CE2	PHE	333	18.860	36.341	19.169	1.00	42.88
ATOM	2270	CZ	PHE	333	19.531	37.001	18.141	1.00	42.87
ATOM	2271	C	PHE	333	19.651	40.393	23.747	1.00	44.42
ATOM	2272	O	PHE	333	19.189	41.530	23.851	1.00	43.85
ATOM	2273	N	ALA	334	19.881	39.600	24.789	1.00	45.14
ATOM	2274	CA	ALA	334	19.592	40.017	26.154	1.00	45.59
ATOM	2275	CB	ALA	334	19.912	38.884	27.121	1.00	45.78
ATOM	2276	C	ALA	334	20.376	41.263	26.538	1.00	45.65
ATOM	2277	O	ALA	334	19.837	42.179	27.162	1.00	46.18
ATOM	2278	N	ASP	335	21.649	41.296	26.160	1.00	45.92
ATOM	2279	CA	ASP	335	22.509	42.429	26.482	1.00	45.71
ATOM	2280	CB	ASP	335	23.977	42.019	26.388	1.00	44.57
ATOM	2281	CG	ASP	335	24.277	40.767	27.177	1.00	43.56
ATOM	2282	OD1	ASP	335	23.536	40.484	28.141	1.00	43.70
ATOM	2283	OD2	ASP	335	25.258	40.071	26.840	1.00	43.87
ATOM	2284	C	ASP	335	22.262	43.629	25.585	1.00	46.23
ATOM	2285	O	ASP	335	22.912	44.660	25.733	1.00	46.45
ATOM	2286	N	GLU	336	21.324	43.491	24.654	1.00	47.36
ATOM	2287	CA	GLU	336	20.999	44.580	23.741	1.00	49.00
ATOM	2288	CB	GLU	336	21.063	44.099	22.290	1.00	49.86
ATOM	2289	CG	GLU	336	22.459	43.725	21.828	1.00	51.33
ATOM	2290	CD	GLU	336	23.450	44.861	22.006	1.00	52.76
ATOM	2291	OE1	GLU	336	23.232	45.943	21.418	1.00	53.76
ATOM	2292	OE2	GLU	336	24.443	44.672	22.741	1.00	53.33
ATOM	2293	C	GLU	336	19.620	45.156	24.026	1.00	49.27
ATOM	2294	O	GLU	336	19.171	46.076	23.341	1.00	49.79
ATOM	2295	N	GLY	337	18.948	44.608	25.033	1.00	49.15
ATOM	2296	CA	GLY	337	17.627	45.094	25.386	1.00	49.61
ATOM	2297	C	GLY	337	16.497	44.169	24.981	1.00	50.11
ATOM	2298	O	GLY	337	15.372	44.318	25.458	1.00	49.98
ATOM	2299	N	LEU	338	16.788	43.219	24.095	1.00	50.32
ATOM	2300	CA	LEU	338	15.779	42.267	23.637	1.00	50.74
ATOM	2301	CB	LEU	338	16.108	41.781	22.223	1.00	50.90
ATOM	2302	CG	LEU	338	15.750	42.728	21.079	1.00	51.60
ATOM	2303	CD1	LEU	338	16.237	42.143	19.763	1.00	52.47
ATOM	2304	CD2	LEU	338	14.243	42.943	21.044	1.00	52.43
ATOM	2305	C	LEU	338	15.674	41.073	24.575	1.00	50.23
ATOM	2306	O	LEU	338	16.430	40.109	24.459	1.00	50.85
ATOM	2307	N	ASN	339	14.729	41.146	25.506	1.00	49.73
ATOM	2308	CA	ASN	339	14.514	40.076	26.469	1.00	48.81
ATOM	2309	CB	ASN	339	14.536	40.647	27.889	1.00	50.75
ATOM	2310	CG	ASN	339	15.942	40.986	28.359	1.00	52.34
ATOM	2311	OD1	ASN	339	16.706	40.105	28.759	1.00	52.97
ATOM	2312	ND2	ASN	339	16.293	42.267	28.301	1.00	52.70
ATOM	2313	C	ASN	339	13.194	39.355	26.204	1.00	46.90
ATOM	2314	O	ASN	339	12.490	38.961	27.129	1.00	46.89
ATOM	2315	N	VAL	340	12.865	39.195	24.927	1.00	44.67
ATOM	2316	CA	VAL	340	11.645	38.509	24.518	1.00	43.58
ATOM	2317	CB	VAL	340	10.563	39.501	24.072	1.00	43.60
ATOM	2318	CG1	VAL	340	9.272	38.758	23.779	1.00	43.89
ATOM	2319	CG2	VAL	340	10.343	40.550	25.147	1.00	43.92
ATOM	2320	C	VAL	340	11.991	37.597	23.345	1.00	42.70
ATOM	2321	O	VAL	340	11.806	37.959	22.182	1.00	42.88
ATOM	2322	N	MET	341	12.496	36.410	23.667	1.00	41.15
ATOM	2323	CA	MET	341	12.910	35.436	22.664	1.00	37.91
ATOM	2324	CB	MET	341	14.278	34.874	23.056	1.00	38.70
ATOM	2325	CG	MET	341	15.403	35.893	22.946	1.00	38.98
ATOM	2326	SD	MET	341	16.816	35.520	23.975	1.00	43.33
ATOM	2327	CE	MET	341	16.743	36.882	25.141	1.00	41.65
ATOM	2328	C	MET	341	11.910	34.299	22.461	1.00	36.58
ATOM	2329	O	MET	341	11.208	33.895	23.389	1.00	34.24
ATOM	2330	N	LEU	342	11.858	33.784	21.236	1.00	33.02
ATOM	2331	CA	LEU	342	10.949	32.697	20.904	1.00	31.78
ATOM	2332	CB	LEU	342	9.873	33.204	19.930	1.00	33.59
ATOM	2333	CG	LEU	342	8.868	32.254	19.260	1.00	35.82
ATOM	2334	CD1	LEU	342	9.491	31.606	18.041	1.00	36.45
ATOM	2335	CD2	LEU	342	8.380	31.210	20.256	1.00	35.85
ATOM	2336	C	LEU	342	11.671	31.485	20.317	1.00	28.89
ATOM	2337	O	LEU	342	12.390	31.594	19.324	1.00	28.45
ATOM	2338	N	VAL	343	11.494	30.334	20.957	1.00	25.63

ATOM	2339	CA	VAL	343	12.099	29.093	20.483	1.00	24.23
ATOM	2340	CB	VAL	343	12.543	28.193	21.664	1.00	24.85
ATOM	2341	CG1	VAL	343	13.222	26.942	21.135	1.00	24.17
ATOM	2342	CG2	VAL	343	13.490	28.960	22.585	1.00	24.85
ATOM	2343	C	VAL	343	11.001	28.393	19.685	1.00	23.87
ATOM	2344	O	VAL	343	10.253	27.575	20.220	1.00	23.67
ATOM	2345	N	GLY	344	10.900	28.737	18.404	1.00	23.68
ATOM	2346	CA	GLY	344	9.871	28.152	17.562	1.00	24.64
ATOM	2347	C	GLY	344	10.312	26.961	16.736	1.00	23.93
ATOM	2348	O	GLY	344	11.507	26.689	16.621	1.00	22.71
ATOM	2349	N	ASP	345	9.340	26.253	16.161	1.00	23.97
ATOM	2350	CA	ASP	345	9.625	25.087	15.342	1.00	24.30
ATOM	2351	CB	ASP	345	8.342	24.306	15.022	1.00	26.36
ATOM	2352	CG	ASP	345	7.201	25.196	14.563	1.00	26.89
ATOM	2353	OD1	ASP	345	7.454	26.315	14.068	1.00	27.29
ATOM	2354	OD2	ASP	345	6.042	24.759	14.691	1.00	28.98
ATOM	2355	C	ASP	345	10.337	25.464	14.051	1.00	25.12
ATOM	2356	O	ASP	345	10.707	24.597	13.260	1.00	25.35
ATOM	2357	N	SER	346	10.538	26.761	13.840	1.00	24.45
ATOM	2358	CA	SER	346	11.237	27.218	12.649	1.00	23.43
ATOM	2359	CB	SER	346	11.273	28.749	12.603	1.00	23.92
ATOM	2360	OG	SER	346	11.844	29.276	13.786	1.00	27.17
ATOM	2361	C	SER	346	12.655	26.655	12.705	1.00	23.97
ATOM	2362	O	SER	346	13.330	26.533	11.685	1.00	24.80
ATOM	2363	N	LEU	347	13.090	26.295	13.909	1.00	22.27
ATOM	2364	CA	LEU	347	14.417	25.730	14.106	1.00	22.38
ATOM	2365	CB	LEU	347	14.664	25.473	15.601	1.00	22.34
ATOM	2366	CG	LEU	347	13.793	24.461	16.355	1.00	23.80
ATOM	2367	CD1	LEU	347	14.374	23.052	16.197	1.00	21.37
ATOM	2368	CD2	LEU	347	13.746	24.838	17.831	1.00	22.86
ATOM	2369	C	LEU	347	14.548	24.426	13.313	1.00	21.48
ATOM	2370	O	LEU	347	15.653	23.970	13.033	1.00	22.19
ATOM	2371	N	GLY	348	13.413	23.835	12.955	1.00	22.76
ATOM	2372	CA	GLY	348	13.439	22.601	12.196	1.00	23.34
ATOM	2373	C	GLY	348	14.005	22.837	10.814	1.00	24.59
ATOM	2374	O	GLY	348	14.534	21.927	10.179	1.00	24.89
ATOM	2375	N	MET	349	13.908	24.078	10.351	1.00	25.57
ATOM	2376	CA	MET	349	14.408	24.431	9.034	1.00	27.75
ATOM	2377	CB	MET	349	13.349	25.255	8.290	1.00	28.73
ATOM	2378	CG	MET	349	12.062	24.479	8.029	1.00	32.37
ATOM	2379	SD	MET	349	10.740	25.431	7.229	1.00	34.95
ATOM	2380	CE	MET	349	11.415	25.598	5.580	1.00	34.51
ATOM	2381	C	MET	349	15.729	25.191	9.118	1.00	27.11
ATOM	2382	O	MET	349	16.700	24.839	8.448	1.00	26.59
ATOM	2383	N	THR	350	15.774	26.205	9.975	1.00	27.84
ATOM	2384	CA	THR	350	16.965	27.031	10.133	1.00	28.17
ATOM	2385	CB	THR	350	16.594	28.375	10.805	1.00	31.28
ATOM	2386	OG1	THR	350	17.720	29.258	10.770	1.00	34.87
ATOM	2387	CG2	THR	350	16.181	28.151	12.249	1.00	31.41
ATOM	2388	C	THR	350	18.098	26.370	10.926	1.00	28.30
ATOM	2389	O	THR	350	19.275	26.666	10.713	1.00	27.38
ATOM	2390	N	VAL	351	17.747	25.470	11.836	1.00	26.54
ATOM	2391	CA	VAL	351	18.750	24.792	12.648	1.00	26.15
ATOM	2392	CB	VAL	351	18.337	24.800	14.136	1.00	27.12
ATOM	2393	CG1	VAL	351	19.340	24.010	14.966	1.00	26.33
ATOM	2394	CG2	VAL	351	18.238	26.239	14.633	1.00	26.84
ATOM	2395	C	VAL	351	18.995	23.347	12.214	1.00	25.31
ATOM	2396	O	VAL	351	20.138	22.943	12.023	1.00	23.95
ATOM	2397	N	GLN	352	17.920	22.574	12.064	1.00	24.36
ATOM	2398	CA	GLN	352	18.036	21.169	11.673	1.00	23.55
ATOM	2399	CB	GLN	352	16.839	20.370	12.200	1.00	23.18
ATOM	2400	CG	GLN	352	16.508	20.642	13.670	1.00	21.36
ATOM	2401	CD	GLN	352	15.365	19.785	14.186	1.00	20.35
ATOM	2402	OE1	GLN	352	14.468	19.417	13.434	1.00	19.01
ATOM	2403	NE2	GLN	352	15.387	19.476	15.484	1.00	18.25
ATOM	2404	C	GLN	352	18.156	20.972	10.159	1.00	24.30
ATOM	2405	O	GLN	352	18.727	19.982	9.703	1.00	24.86
ATOM	2406	N	GLY	353	17.602	21.900	9.385	1.00	24.94
ATOM	2407	CA	GLY	353	17.688	21.796	7.938	1.00	26.08
ATOM	2408	C	GLY	353	16.607	20.985	7.245	1.00	28.43
ATOM	2409	O	GLY	353	16.866	20.335	6.229	1.00	29.40
ATOM	2410	N	HIS	354	15.393	21.020	7.781	1.00	28.07
ATOM	2411	CA	HIS	354	14.280	20.291	7.192	1.00	29.87
ATOM	2412	CB	HIS	354	13.328	19.807	8.286	1.00	28.92
ATOM	2413	CG	HIS	354	13.906	18.740	9.161	1.00	28.40
ATOM	2414	CD2	HIS	354	14.175	18.722	10.488	1.00	28.09
ATOM	2415	ND1	HIS	354	14.272	17.501	8.679	1.00	28.16

ATOM	2416	CE1	HIS	354	14.741	16.766	9.671	1.00	28.40
ATOM	2417	NE2	HIS	354	14.693	17.484	10.780	1.00	27.51
ATOM	2418	C	HIS	354	13.520	21.162	6.198	1.00	31.29
ATOM	2419	O	HIS	354	13.625	22.389	6.227	1.00	31.35
ATOM	2420	N	ASP	355	12.755	20.518	5.320	1.00	33.89
ATOM	2421	CA	ASP	355	11.972	21.224	4.305	1.00	34.61
ATOM	2422	CB	ASP	355	11.479	20.231	3.245	1.00	38.73
ATOM	2423	CG	ASP	355	10.673	19.085	3.842	1.00	41.27
ATOM	2424	OD1	ASP	355	9.606	19.349	4.430	1.00	43.21
ATOM	2425	OD2	ASP	355	11.109	17.916	3.719	1.00	44.12
ATOM	2426	C	ASP	355	10.786	21.953	4.928	1.00	34.04
ATOM	2427	O	ASP	355	10.248	22.898	4.348	1.00	33.77
ATOM	2428	N	SER	356	10.382	21.503	6.111	1.00	31.25
ATOM	2429	CA	SER	356	9.268	22.106	6.832	1.00	29.42
ATOM	2430	CB	SER	356	7.963	21.353	6.531	1.00	29.55
ATOM	2431	OG	SER	356	7.976	20.046	7.086	1.00	30.40
ATOM	2432	C	SER	356	9.564	22.058	8.330	1.00	26.94
ATOM	2433	O	SER	356	10.642	21.627	8.739	1.00	26.83
ATOM	2434	N	THR	357	8.612	22.498	9.145	1.00	26.28
ATOM	2435	CA	THR	357	8.803	22.491	10.592	1.00	24.80
ATOM	2436	CB	THR	357	8.205	23.749	11.254	1.00	23.50
ATOM	2437	OG1	THR	357	6.780	23.735	11.093	1.00	25.56
ATOM	2438	CG2	THR	357	8.777	25.017	10.630	1.00	26.01
ATOM	2439	C	THR	357	8.141	21.288	11.252	1.00	22.76
ATOM	2440	O	THR	357	8.262	21.106	12.458	1.00	21.76
ATOM	2441	N	LEU	358	7.449	20.466	10.470	1.00	21.94
ATOM	2442	CA	LEU	358	6.757	19.306	11.036	1.00	20.73
ATOM	2443	CB	LEU	358	5.987	18.553	9.946	1.00	22.06
ATOM	2444	CG	LEU	358	4.696	19.207	9.447	1.00	22.23
ATOM	2445	CD1	LEU	358	5.036	20.431	8.609	1.00	24.54
ATOM	2446	CD2	LEU	358	3.901	18.213	8.623	1.00	21.61
ATOM	2447	C	LEU	358	7.620	18.311	11.807	1.00	19.69
ATOM	2448	O	LEU	358	7.169	17.732	12.792	1.00	19.43
ATOM	2449	N	PRO	359	8.861	18.077	11.359	1.00	19.49
ATOM	2450	CD	PRO	359	9.445	18.471	10.067	1.00	20.99
ATOM	2451	CA	PRO	359	9.738	17.130	12.057	1.00	19.78
ATOM	2452	CB	PRO	359	10.917	16.974	11.095	1.00	21.23
ATOM	2453	CG	PRO	359	10.905	18.271	10.325	1.00	25.57
ATOM	2454	C	PRO	359	10.184	17.534	13.461	1.00	18.27
ATOM	2455	O	PRO	359	10.685	16.705	14.225	1.00	16.56
ATOM	2456	N	VAL	360	9.993	18.800	13.806	1.00	17.80
ATOM	2457	CA	VAL	360	10.397	19.290	15.116	1.00	17.74
ATOM	2458	CB	VAL	360	10.204	20.816	15.226	1.00	16.25
ATOM	2459	CG1	VAL	360	10.676	21.301	16.582	1.00	15.89
ATOM	2460	CG2	VAL	360	10.967	21.508	14.114	1.00	16.99
ATOM	2461	C	VAL	360	9.589	18.608	16.205	1.00	17.81
ATOM	2462	O	VAL	360	8.362	18.577	16.152	1.00	16.42
ATOM	2463	N	THR	361	10.280	18.056	17.195	1.00	18.83
ATOM	2464	CA	THR	361	9.594	17.376	18.283	1.00	19.94
ATOM	2465	CB	THR	361	10.216	15.983	18.540	1.00	23.20
ATOM	2466	OG1	THR	361	10.537	15.352	17.289	1.00	26.54
ATOM	2467	CG2	THR	361	9.221	15.091	19.257	1.00	27.25
ATOM	2468	C	THR	361	9.656	18.195	19.571	1.00	19.28
ATOM	2469	O	THR	361	10.442	19.138	19.679	1.00	17.95
ATOM	2470	N	VAL	362	8.820	17.841	20.544	1.00	17.01
ATOM	2471	CA	VAL	362	8.807	18.545	21.827	1.00	17.54
ATOM	2472	CB	VAL	362	7.753	17.930	22.787	1.00	16.12
ATOM	2473	CG1	VAL	362	7.835	18.598	24.156	1.00	15.29
ATOM	2474	CG2	VAL	362	6.352	18.108	22.198	1.00	16.25
ATOM	2475	C	VAL	362	10.202	18.463	22.450	1.00	16.96
ATOM	2476	O	VAL	362	10.703	19.445	22.989	1.00	16.86
ATOM	2477	N	ALA	363	10.829	17.293	22.351	1.00	17.98
ATOM	2478	CA	ALA	363	12.164	17.088	22.903	1.00	18.14
ATOM	2479	CB	ALA	363	12.638	15.659	22.632	1.00	20.14
ATOM	2480	C	ALA	363	13.161	18.086	22.327	1.00	18.21
ATOM	2481	O	ALA	363	14.042	18.574	23.043	1.00	17.54
ATOM	2482	N	ASP	364	13.029	18.378	21.032	1.00	16.91
ATOM	2483	CA	ASP	364	13.923	19.334	20.371	1.00	16.57
ATOM	2484	CB	ASP	364	13.661	19.410	18.854	1.00	15.99
ATOM	2485	CG	ASP	364	13.951	18.099	18.123	1.00	17.52
ATOM	2486	OD1	ASP	364	14.817	17.312	18.572	1.00	15.98
ATOM	2487	OD2	ASP	364	13.311	17.873	17.072	1.00	19.08
ATOM	2488	C	ASP	364	13.691	20.720	20.974	1.00	15.38
ATOM	2489	O	ASP	364	14.638	21.421	21.320	1.00	17.32
ATOM	2490	N	ILE	365	12.427	21.115	21.088	1.00	17.64
ATOM	2491	CA	ILE	365	12.092	22.422	21.651	1.00	16.80
ATOM	2492	CB	ILE	365	10.561	22.646	21.717	1.00	16.19

ATOM	2493	CG2	ILE	365	10.265	23.986	22.395	1.00	19.39
ATOM	2494	CG1	ILE	365	9.946	22.599	20.310	1.00	16.26
ATOM	2495	CD1	ILE	365	10.399	23.713	19.379	1.00	17.28
ATOM	2496	C	ILE	365	12.646	22.560	23.066	1.00	16.75
ATOM	2497	O	ILE	365	13.217	23.596	23.423	1.00	15.83
ATOM	2498	N	ALA	366	12.474	21.518	23.878	1.00	15.24
ATOM	2499	CA	ALA	366	12.959	21.549	25.260	1.00	15.66
ATOM	2500	CB	ALA	366	12.533	20.278	25.999	1.00	15.05
ATOM	2501	C	ALA	366	14.474	21.688	25.292	1.00	15.90
ATOM	2502	O	ALA	366	15.036	22.363	26.161	1.00	16.01
ATOM	2503	N	TYR	367	15.136	21.040	24.341	1.00	15.21
ATOM	2504	CA	TYR	367	16.596	21.093	24.247	1.00	15.10
ATOM	2505	CB	TYR	367	17.082	20.191	23.106	1.00	14.11
ATOM	2506	CG	TYR	367	18.577	20.270	22.837	1.00	15.47
ATOM	2507	CD1	TYR	367	19.504	19.782	23.755	1.00	15.21
ATOM	2508	CE1	TYR	367	20.881	19.830	23.492	1.00	16.91
ATOM	2509	CD2	TYR	367	19.060	20.815	21.651	1.00	17.33
ATOM	2510	CE2	TYR	367	20.428	20.868	21.382	1.00	17.98
ATOM	2511	CZ	TYR	367	21.330	20.371	22.306	1.00	16.29
ATOM	2512	OH	TYR	367	22.681	20.386	22.013	1.00	15.79
ATOM	2513	C	TYR	367	17.051	22.525	23.986	1.00	16.84
ATOM	2514	O	TYR	367	17.918	23.063	24.688	1.00	17.12
ATOM	2515	N	HIS	368	16.467	23.141	22.965	1.00	17.61
ATOM	2516	CA	HIS	368	16.831	24.511	22.611	1.00	19.23
ATOM	2517	CB	HIS	368	16.277	24.847	21.220	1.00	18.64
ATOM	2518	CG	HIS	368	16.970	24.112	20.114	1.00	19.41
ATOM	2519	CD2	HIS	368	16.608	23.014	19.409	1.00	19.84
ATOM	2520	ND1	HIS	368	18.241	24.438	19.690	1.00	20.14
ATOM	2521	CE1	HIS	368	18.633	23.570	18.775	1.00	20.20
ATOM	2522	NE2	HIS	368	17.662	22.694	18.587	1.00	20.30
ATOM	2523	C	HIS	368	16.360	25.516	23.661	1.00	20.01
ATOM	2524	O	HIS	368	17.047	26.500	23.936	1.00	21.66
ATOM	2525	N	THR	369	15.202	25.258	24.259	1.00	19.85
ATOM	2526	CA	THR	369	14.677	26.143	25.289	1.00	21.15
ATOM	2527	CB	THR	369	13.305	25.659	25.796	1.00	21.21
ATOM	2528	OG1	THR	369	12.336	25.804	24.750	1.00	22.15
ATOM	2529	CG2	THR	369	12.860	26.466	27.012	1.00	21.16
ATOM	2530	C	THR	369	15.634	26.241	26.474	1.00	22.56
ATOM	2531	O	THR	369	15.905	27.338	26.974	1.00	23.65
ATOM	2532	N	ALA	370	16.154	25.100	26.918	1.00	21.27
ATOM	2533	CA	ALA	370	17.078	25.078	28.051	1.00	23.22
ATOM	2534	CB	ALA	370	17.481	23.640	28.372	1.00	22.74
ATOM	2535	C	ALA	370	18.322	25.913	27.752	1.00	24.33
ATOM	2536	O	ALA	370	18.775	26.694	28.593	1.00	24.36
ATOM	2537	N	ALA	371	18.862	25.744	26.548	1.00	24.54
ATOM	2538	CA	ALA	371	20.050	26.480	26.115	1.00	26.15
ATOM	2539	CB	ALA	371	20.465	26.019	24.719	1.00	24.54
ATOM	2540	C	ALA	371	19.795	27.986	26.109	1.00	27.22
ATOM	2541	O	ALA	371	20.610	28.766	26.601	1.00	29.91
ATOM	2542	N	VAL	372	18.662	28.387	25.543	1.00	27.69
ATOM	2543	CA	VAL	372	18.299	29.796	25.473	1.00	28.62
ATOM	2544	CB	VAL	372	16.975	29.992	24.699	1.00	29.37
ATOM	2545	CG1	VAL	372	16.541	31.448	24.749	1.00	28.12
ATOM	2546	CG2	VAL	372	17.154	29.546	23.257	1.00	29.50
ATOM	2547	C	VAL	372	18.153	30.393	26.868	1.00	29.28
ATOM	2548	O	VAL	372	18.633	31.499	27.130	1.00	28.13
ATOM	2549	N	ARG	373	17.496	29.661	27.762	1.00	29.17
ATOM	2550	CA	ARG	373	17.299	30.138	29.128	1.00	29.87
ATOM	2551	CB	ARG	373	16.500	29.118	29.951	1.00	29.61
ATOM	2552	CG	ARG	373	16.378	29.474	31.437	1.00	29.17
ATOM	2553	CD	ARG	373	15.773	30.858	31.623	1.00	26.49
ATOM	2554	NE	ARG	373	14.370	30.903	31.228	1.00	28.14
ATOM	2555	CZ	ARG	373	13.703	32.022	30.961	1.00	27.87
ATOM	2556	NH1	ARG	373	14.307	33.199	31.042	1.00	27.29
ATOM	2557	NH2	ARG	373	12.427	31.967	30.614	1.00	28.85
ATOM	2558	C	ARG	373	18.630	30.415	29.811	1.00	31.14
ATOM	2559	O	ARG	373	18.763	31.394	30.547	1.00	31.51
ATOM	2560	N	ARG	374	19.615	29.554	29.573	1.00	32.05
ATOM	2561	CA	ARG	374	20.928	29.743	30.175	1.00	34.06
ATOM	2562	CB	ARG	374	21.873	28.597	29.798	1.00	33.29
ATOM	2563	CG	ARG	374	21.388	27.221	30.202	1.00	33.93
ATOM	2564	CD	ARG	374	22.522	26.212	30.150	1.00	32.70
ATOM	2565	NE	ARG	374	22.071	24.854	30.450	1.00	33.93
ATOM	2566	CZ	ARG	374	21.510	24.033	29.565	1.00	33.76
ATOM	2567	NH1	ARG	374	21.329	24.423	28.311	1.00	30.05
ATOM	2568	NH2	ARG	374	21.131	22.817	29.936	1.00	33.89
ATOM	2569	C	ARG	374	21.532	31.066	29.713	1.00	34.72

ATOM	2570	O	ARG	374	22.160	31.780	30.496	1.00	36.00
ATOM	2571	N	GLY	375	21.331	31.388	28.439	1.00	35.42
ATOM	2572	CA	GLY	375	21.866	32.621	27.892	1.00	36.12
ATOM	2573	C	GLY	375	21.128	33.871	28.331	1.00	36.83
ATOM	2574	O	GLY	375	21.711	34.954	28.352	1.00	36.60
ATOM	2575	N	ALA	376	19.851	33.724	28.683	1.00	36.57
ATOM	2576	CA	ALA	376	19.027	34.851	29.114	1.00	37.33
ATOM	2577	CB	ALA	376	18.332	35.474	27.906	1.00	36.41
ATOM	2578	C	ALA	376	17.985	34.414	30.145	1.00	37.86
ATOM	2579	O	ALA	376	16.805	34.265	29.827	1.00	38.51
ATOM	2580	N	PRO	377	18.410	34.215	31.401	1.00	38.37
ATOM	2581	CD	PRO	377	19.789	34.359	31.901	1.00	38.55
ATOM	2582	CA	PRO	377	17.509	33.790	32.478	1.00	38.64
ATOM	2583	CB	PRO	377	18.474	33.389	33.586	1.00	39.17
ATOM	2584	CG	PRO	377	19.588	34.359	33.404	1.00	38.79
ATOM	2585	C	PRO	377	16.513	34.851	32.936	1.00	38.71
ATOM	2586	O	PRO	377	15.691	34.596	33.814	1.00	38.56
ATOM	2587	N	ASN	378	16.580	36.033	32.334	1.00	38.88
ATOM	2588	CA	ASN	378	15.682	37.120	32.707	1.00	39.81
ATOM	2589	CB	ASN	378	16.490	38.288	33.279	1.00	41.15
ATOM	2590	CG	ASN	378	17.316	37.889	34.484	1.00	41.16
ATOM	2591	OD1	ASN	378	16.779	37.468	35.504	1.00	42.22
ATOM	2592	ND2	ASN	378	18.632	38.018	34.369	1.00	43.85
ATOM	2593	C	ASN	378	14.838	37.613	31.540	1.00	39.91
ATOM	2594	O	ASN	378	14.375	38.754	31.541	1.00	42.79
ATOM	2595	N	CYS	379	14.635	36.763	30.541	1.00	38.30
ATOM	2596	CA	CYS	379	13.843	37.164	29.383	1.00	36.58
ATOM	2597	CB	CYS	379	14.585	36.836	28.088	1.00	36.64
ATOM	2598	SG	CYS	379	14.422	35.102	27.558	1.00	37.37
ATOM	2599	C	CYS	379	12.494	36.460	29.355	1.00	34.98
ATOM	2600	O	CYS	379	12.290	35.465	30.039	1.00	35.06
ATOM	2601	N	LEU	380	11.576	37.002	28.565	1.00	33.89
ATOM	2602	CA	LEU	380	10.261	36.411	28.397	1.00	32.87
ATOM	2603	CB	LEU	380	9.261	37.459	27.910	1.00	34.44
ATOM	2604	CG	LEU	380	7.810	36.999	27.743	1.00	34.49
ATOM	2605	CD1	LEU	380	7.243	36.590	29.094	1.00	36.11
ATOM	2606	CD2	LEU	380	6.982	38.120	27.139	1.00	36.04
ATOM	2607	C	LEU	380	10.485	35.353	27.319	1.00	32.33
ATOM	2608	O	LEU	380	10.675	35.686	26.147	1.00	31.37
ATOM	2609	N	LEU	381	10.477	34.083	27.715	1.00	30.46
ATOM	2610	CA	LEU	381	10.726	32.994	26.775	1.00	28.43
ATOM	2611	CB	LEU	381	11.683	31.976	27.416	1.00	28.20
ATOM	2612	CG	LEU	381	12.577	31.092	26.539	1.00	29.26
ATOM	2613	CD1	LEU	381	13.529	30.320	27.435	1.00	28.20
ATOM	2614	CD2	LEU	381	11.746	30.134	25.695	1.00	31.72
ATOM	2615	C	LEU	381	9.463	32.284	26.308	1.00	26.84
ATOM	2616	O	LEU	381	8.751	31.672	27.104	1.00	25.66
ATOM	2617	N	LEU	382	9.184	32.377	25.013	1.00	25.90
ATOM	2618	CA	LEU	382	8.026	31.706	24.436	1.00	26.12
ATOM	2619	CB	LEU	382	7.317	32.600	23.415	1.00	27.68
ATOM	2620	CG	LEU	382	6.383	33.685	23.955	1.00	29.10
ATOM	2621	CD1	LEU	382	7.172	34.713	24.751	1.00	29.94
ATOM	2622	CD2	LEU	382	5.667	34.344	22.779	1.00	30.46
ATOM	2623	C	LEU	382	8.528	30.450	23.743	1.00	24.87
ATOM	2624	O	LEU	382	9.485	30.499	22.973	1.00	24.72
ATOM	2625	N	ALA	383	7.888	29.323	24.027	1.00	24.02
ATOM	2626	CA	ALA	383	8.286	28.060	23.422	1.00	22.33
ATOM	2627	CB	ALA	383	8.631	27.050	24.503	1.00	22.02
ATOM	2628	C	ALA	383	7.157	27.530	22.567	1.00	20.94
ATOM	2629	O	ALA	383	6.016	27.446	23.017	1.00	20.60
ATOM	2630	N	ASP	384	7.467	27.165	21.331	1.00	20.39
ATOM	2631	CA	ASP	384	6.440	26.631	20.448	1.00	20.57
ATOM	2632	CB	ASP	384	6.888	26.689	18.995	1.00	22.20
ATOM	2633	CG	ASP	384	6.278	27.847	18.232	1.00	24.06
ATOM	2634	OD1	ASP	384	5.235	28.372	18.661	1.00	26.53
ATOM	2635	OD2	ASP	384	6.842	28.206	17.187	1.00	26.60
ATOM	2636	C	ASP	384	6.139	25.180	20.751	1.00	18.93
ATOM	2637	O	ASP	384	7.027	24.425	21.139	1.00	19.05
ATOM	2638	N	LEU	385	4.877	24.800	20.590	1.00	19.70
ATOM	2639	CA	LEU	385	4.504	23.398	20.725	1.00	19.65
ATOM	2640	CB	LEU	385	3.133	23.222	21.374	1.00	17.71
ATOM	2641	CG	LEU	385	3.087	23.370	22.901	1.00	16.98
ATOM	2642	CD1	LEU	385	1.716	22.965	23.429	1.00	15.13
ATOM	2643	CD2	LEU	385	4.162	22.498	23.523	1.00	16.02
ATOM	2644	C	LEU	385	4.462	23.012	19.246	1.00	20.97
ATOM	2645	O	LEU	385	3.705	23.596	18.461	1.00	21.82
ATOM	2646	N	PRO	386	5.303	22.047	18.841	1.00	19.88

ATOM	2647	CD	PRO	386	6.168	21.273	19.747	1.00	20.26
ATOM	2648	CA	PRO	386	5.416	21.554	17.466	1.00	19.86
ATOM	2649	CB	PRO	386	6.626	20.633	17.537	1.00	21.72
ATOM	2650	CG	PRO	386	6.512	20.061	18.921	1.00	20.75
ATOM	2651	C	PRO	386	4.184	20.846	16.905	1.00	19.67
ATOM	2652	O	PRO	386	3.167	20.679	17.586	1.00	19.34
ATOM	2653	N	PHE	387	4.300	20.437	15.647	1.00	19.25
ATOM	2654	CA	PHE	387	3.248	19.739	14.927	1.00	18.90
ATOM	2655	CB	PHE	387	3.820	19.249	13.580	1.00	20.39
ATOM	2656	CG	PHE	387	2.955	18.253	12.861	1.00	20.40
ATOM	2657	CD1	PHE	387	1.653	18.573	12.479	1.00	21.35
ATOM	2658	CD2	PHE	387	3.457	16.992	12.545	1.00	21.11
ATOM	2659	CE1	PHE	387	0.863	17.651	11.789	1.00	22.07
ATOM	2660	CE2	PHE	387	2.681	16.064	11.858	1.00	19.74
ATOM	2661	CZ	PHE	387	1.377	16.394	11.478	1.00	21.80
ATOM	2662	C	PHE	387	2.687	18.571	15.741	1.00	18.09
ATOM	2663	O	PHE	387	3.435	17.728	16.243	1.00	17.02
ATOM	2664	N	MET	388	1.363	18.562	15.881	1.00	17.04
ATOM	2665	CA	MET	388	0.615	17.528	16.589	1.00	18.41
ATOM	2666	CB	MET	388	0.742	16.197	15.839	1.00	19.83
ATOM	2667	CG	MET	388	-0.430	15.255	16.044	1.00	19.70
ATOM	2668	SD	MET	388	-1.962	15.929	15.362	1.00	19.18
ATOM	2669	CE	MET	388	-1.899	15.299	13.685	1.00	23.05
ATOM	2670	C	MET	388	0.986	17.332	18.062	1.00	18.34
ATOM	2671	O	MET	388	0.779	16.254	18.622	1.00	19.91
ATOM	2672	N	ALA	389	1.520	18.376	18.688	1.00	17.11
ATOM	2673	CA	ALA	389	1.896	18.314	20.099	1.00	17.62
ATOM	2674	CB	ALA	389	3.178	19.124	20.345	1.00	16.15
ATOM	2675	C	ALA	389	0.764	18.839	20.987	1.00	17.04
ATOM	2676	O	ALA	389	0.893	18.891	22.211	1.00	17.48
ATOM	2677	N	TYR	390	-0.343	19.231	20.367	1.00	17.06
ATOM	2678	CA	TYR	390	-1.496	19.727	21.111	1.00	18.54
ATOM	2679	CB	TYR	390	-1.422	21.261	21.266	1.00	17.65
ATOM	2680	CG	TYR	390	-1.128	22.020	19.987	1.00	18.84
ATOM	2681	CD1	TYR	390	-2.157	22.468	19.157	1.00	21.00
ATOM	2682	CE1	TYR	390	-1.881	23.124	17.950	1.00	21.33
ATOM	2683	CD2	TYR	390	0.183	22.247	19.585	1.00	19.67
ATOM	2684	CE2	TYR	390	0.471	22.895	18.390	1.00	22.68
ATOM	2685	CZ	TYR	390	-0.566	23.329	17.579	1.00	21.64
ATOM	2686	OH	TYR	390	-0.262	23.963	16.394	1.00	23.80
ATOM	2687	C	TYR	390	-2.790	19.291	20.437	1.00	18.26
ATOM	2688	O	TYR	390	-3.765	20.039	20.376	1.00	18.45
ATOM	2689	N	ALA	391	-2.780	18.050	19.949	1.00	18.00
ATOM	2690	CA	ALA	391	-3.915	17.447	19.253	1.00	17.25
ATOM	2691	CB	ALA	391	-3.497	16.109	18.656	1.00	18.23
ATOM	2692	C	ALA	391	-5.112	17.258	20.177	1.00	17.88
ATOM	2693	O	ALA	391	-6.250	17.147	19.719	1.00	18.08
ATOM	2694	N	THR	392	-4.846	17.195	21.478	1.00	15.74
ATOM	2695	CA	THR	392	-5.901	17.062	22.474	1.00	15.08
ATOM	2696	CB	THR	392	-6.124	15.605	22.917	1.00	17.15
ATOM	2697	OG1	THR	392	-4.980	15.146	23.645	1.00	17.01
ATOM	2698	CG2	THR	392	-6.350	14.704	21.713	1.00	18.95
ATOM	2699	C	THR	392	-5.445	17.857	23.682	1.00	14.74
ATOM	2700	O	THR	392	-4.252	18.072	23.866	1.00	15.11
ATOM	2701	N	PRO	393	-6.389	18.315	24.515	1.00	13.96
ATOM	2702	CD	PRO	393	-7.851	18.291	24.353	1.00	15.31
ATOM	2703	CA	PRO	393	-6.010	19.090	25.698	1.00	16.25
ATOM	2704	CB	PRO	393	-7.349	19.309	26.398	1.00	15.99
ATOM	2705	CG	PRO	393	-8.296	19.436	25.243	1.00	14.27
ATOM	2706	C	PRO	393	-5.016	18.320	26.550	1.00	16.25
ATOM	2707	O	PRO	393	-3.983	18.855	26.964	1.00	16.74
ATOM	2708	N	GLU	394	-5.323	17.049	26.781	1.00	17.06
ATOM	2709	CA	GLU	394	-4.474	16.188	27.586	1.00	18.79
ATOM	2710	CB	GLU	394	-5.044	14.771	27.591	1.00	22.17
ATOM	2711	CG	GLU	394	-4.455	13.860	28.630	1.00	29.13
ATOM	2712	CD	GLU	394	-5.105	12.495	28.613	1.00	33.05
ATOM	2713	OE1	GLU	394	-4.687	11.644	27.797	1.00	35.69
ATOM	2714	OE2	GLU	394	-6.055	12.288	29.402	1.00	34.53
ATOM	2715	C	GLU	394	-3.029	16.167	27.088	1.00	17.93
ATOM	2716	O	GLU	394	-2.092	16.296	27.878	1.00	17.60
ATOM	2717	N	GLN	395	-2.832	16.002	25.783	1.00	16.16
ATOM	2718	CA	GLN	395	-1.469	15.973	25.261	1.00	18.13
ATOM	2719	CB	GLN	395	-1.451	15.465	23.819	1.00	19.78
ATOM	2720	CG	GLN	395	-1.662	13.958	23.738	1.00	26.51
ATOM	2721	CD	GLN	395	-1.756	13.447	22.320	1.00	27.20
ATOM	2722	OE1	GLN	395	-0.821	13.590	21.535	1.00	31.74
ATOM	2723	NE2	GLN	395	-2.889	12.836	21.986	1.00	31.16

ATOM	2724	C	GLN	395	-0.812	17.342	25.348	1.00	16.31
ATOM	2725	O	GLN	395	0.394	17.448	25.560	1.00	15.19
ATOM	2726	N	ALA	396	-1.611	18.389	25.172	1.00	15.71
ATOM	2727	CA	ALA	396	-1.097	19.748	25.258	1.00	15.45
ATOM	2728	CB	ALA	396	-2.203	20.754	24.941	1.00	14.95
ATOM	2729	C	ALA	396	-0.552	19.995	26.665	1.00	15.89
ATOM	2730	O	ALA	396	0.535	20.548	26.832	1.00	15.31
ATOM	2731	N	PHE	397	-1.306	19.581	27.679	1.00	17.14
ATOM	2732	CA	PHE	397	-0.862	19.780	29.059	1.00	17.67
ATOM	2733	CB	PHE	397	-1.855	19.179	30.062	1.00	17.74
ATOM	2734	CG	PHE	397	-3.276	19.626	29.876	1.00	15.92
ATOM	2735	CD1	PHE	397	-3.571	20.887	29.368	1.00	17.98
ATOM	2736	CD2	PHE	397	-4.325	18.787	30.242	1.00	18.15
ATOM	2737	CE1	PHE	397	-4.891	21.311	29.222	1.00	20.21
ATOM	2738	CE2	PHE	397	-5.650	19.197	30.103	1.00	19.30
ATOM	2739	CZ	PHE	397	-5.934	20.465	29.591	1.00	20.13
ATOM	2740	C	PHE	397	0.496	19.120	29.277	1.00	17.87
ATOM	2741	O	PHE	397	1.397	19.710	29.867	1.00	18.64
ATOM	2742	N	GLU	398	0.628	17.887	28.793	1.00	18.39
ATOM	2743	CA	GLU	398	1.853	17.109	28.942	1.00	19.60
ATOM	2744	CB	GLU	398	1.612	15.691	28.411	1.00	22.86
ATOM	2745	CG	GLU	398	2.689	14.663	28.722	1.00	27.33
ATOM	2746	CD	GLU	398	2.800	14.340	30.203	1.00	31.00
ATOM	2747	OE1	GLU	398	1.840	14.603	30.958	1.00	32.52
ATOM	2748	OE2	GLU	398	3.854	13.804	30.606	1.00	34.89
ATOM	2749	C	GLU	398	3.047	17.740	28.224	1.00	17.86
ATOM	2750	O	GLU	398	4.139	17.864	28.791	1.00	17.51
ATOM	2751	N	ASN	399	2.836	18.143	26.977	1.00	17.52
ATOM	2752	CA	ASN	399	3.903	18.750	26.184	1.00	17.00
ATOM	2753	CB	ASN	399	3.545	18.695	24.696	1.00	17.91
ATOM	2754	CG	ASN	399	3.554	17.274	24.171	1.00	17.94
ATOM	2755	OD1	ASN	399	4.421	16.482	24.557	1.00	16.74
ATOM	2756	ND2	ASN	399	2.614	16.939	23.297	1.00	14.86
ATOM	2757	C	ASN	399	4.248	20.174	26.598	1.00	16.90
ATOM	2758	O	ASN	399	5.426	20.560	26.582	1.00	14.68
ATOM	2759	N	ALA	400	3.231	20.958	26.953	1.00	17.41
ATOM	2760	CA	ALA	400	3.465	22.324	27.403	1.00	17.58
ATOM	2761	CB	ALA	400	2.136	23.038	27.668	1.00	17.90
ATOM	2762	C	ALA	400	4.272	22.249	28.694	1.00	17.52
ATOM	2763	O	ALA	400	5.199	23.028	28.902	1.00	18.40
ATOM	2764	N	ALA	401	3.925	21.298	29.558	1.00	18.00
ATOM	2765	CA	ALA	401	4.629	21.152	30.825	1.00	17.86
ATOM	2766	CB	ALA	401	3.953	20.085	31.698	1.00	17.24
ATOM	2767	C	ALA	401	6.087	20.800	30.599	1.00	17.50
ATOM	2768	O	ALA	401	6.966	21.243	31.341	1.00	17.32
ATOM	2769	N	THR	402	6.349	20.004	29.569	1.00	17.75
ATOM	2770	CA	THR	402	7.714	19.604	29.259	1.00	17.20
ATOM	2771	CB	THR	402	7.744	18.579	28.100	1.00	17.19
ATOM	2772	OG1	THR	402	7.194	17.332	28.551	1.00	15.26
ATOM	2773	CG2	THR	402	9.169	18.361	27.621	1.00	17.10
ATOM	2774	C	THR	402	8.576	20.807	28.883	1.00	18.60
ATOM	2775	O	THR	402	9.690	20.954	29.380	1.00	18.32
ATOM	2776	N	VAL	403	8.063	21.675	28.016	1.00	18.13
ATOM	2777	CA	VAL	403	8.845	22.830	27.603	1.00	19.86
ATOM	2778	CB	VAL	403	8.313	23.416	26.275	1.00	20.58
ATOM	2779	CG1	VAL	403	9.411	24.207	25.600	1.00	25.39
ATOM	2780	CG2	VAL	403	7.857	22.290	25.344	1.00	22.84
ATOM	2781	C	VAL	403	8.886	23.901	28.702	1.00	21.59
ATOM	2782	O	VAL	403	9.825	24.701	28.769	1.00	21.71
ATOM	2783	N	MET	404	7.870	23.909	29.563	1.00	21.27
ATOM	2784	CA	MET	404	7.819	24.849	30.682	1.00	23.55
ATOM	2785	CB	MET	404	6.442	24.813	31.354	1.00	26.11
ATOM	2786	CG	MET	404	5.312	25.363	30.498	1.00	30.04
ATOM	2787	SD	MET	404	5.514	27.112	30.150	1.00	34.43
ATOM	2788	CE	MET	404	4.846	27.830	31.675	1.00	33.59
ATOM	2789	C	MET	404	8.902	24.474	31.704	1.00	22.56
ATOM	2790	O	MET	404	9.649	25.335	32.168	1.00	23.06
ATOM	2791	N	ARG	405	8.988	23.190	32.053	1.00	20.96
ATOM	2792	CA	ARG	405	9.998	22.739	33.008	1.00	21.29
ATOM	2793	CB	ARG	405	9.816	21.254	33.365	1.00	19.72
ATOM	2794	CG	ARG	405	8.471	20.900	33.973	1.00	19.05
ATOM	2795	CD	ARG	405	8.506	19.570	34.721	1.00	18.65
ATOM	2796	NE	ARG	405	7.157	19.145	35.096	1.00	18.95
ATOM	2797	CZ	ARG	405	6.330	18.474	34.299	1.00	21.33
ATOM	2798	NH1	ARG	405	6.717	18.130	33.075	1.00	23.18
ATOM	2799	NH2	ARG	405	5.101	18.180	34.709	1.00	20.27
ATOM	2800	C	ARG	405	11.395	22.948	32.419	1.00	21.30

ATOM	2801	O	ARG	405	12.385	23.004	33.144	1.00	20.18
ATOM	2802	N	ALA	406	11.465	23.068	31.097	1.00	21.02
ATOM	2803	CA	ALA	406	12.734	23.272	30.421	1.00	21.90
ATOM	2804	CB	ALA	406	12.625	22.844	28.961	1.00	22.53
ATOM	2805	C	ALA	406	13.188	24.730	30.511	1.00	24.17
ATOM	2806	O	ALA	406	14.331	25.050	30.182	1.00	24.00
ATOM	2807	N	GLY	407	12.298	25.616	30.950	1.00	24.29
ATOM	2808	CA	GLY	407	12.671	27.017	31.083	1.00	27.67
ATOM	2809	C	GLY	407	11.739	28.021	30.429	1.00	27.96
ATOM	2810	O	GLY	407	11.841	29.225	30.672	1.00	27.55
ATOM	2811	N	ALA	408	10.827	27.536	29.595	1.00	28.22
ATOM	2812	CA	ALA	408	9.892	28.423	28.920	1.00	27.88
ATOM	2813	CB	ALA	408	9.114	27.654	27.861	1.00	29.62
ATOM	2814	C	ALA	408	8.928	29.058	29.915	1.00	28.28
ATOM	2815	O	ALA	408	8.602	28.462	30.944	1.00	27.83
ATOM	2816	N	ASN	409	8.480	30.271	29.602	1.00	27.03
ATOM	2817	CA	ASN	409	7.539	30.996	30.454	1.00	27.18
ATOM	2818	CB	ASN	409	7.971	32.453	30.632	1.00	29.08
ATOM	2819	CG	ASN	409	9.327	32.590	31.274	1.00	28.79
ATOM	2820	OD1	ASN	409	9.552	32.124	32.394	1.00	28.82
ATOM	2821	ND2	ASN	409	10.245	33.244	30.571	1.00	27.34
ATOM	2822	C	ASN	409	6.156	30.993	29.823	1.00	26.67
ATOM	2823	O	ASN	409	5.150	31.201	30.501	1.00	25.46
ATOM	2824	N	MET	410	6.114	30.767	28.515	1.00	24.91
ATOM	2825	CA	MET	410	4.853	30.758	27.781	1.00	24.64
ATOM	2826	CB	MET	410	4.549	32.173	27.279	1.00	26.21
ATOM	2827	CG	MET	410	3.244	32.339	26.516	1.00	28.39
ATOM	2828	SD	MET	410	3.036	34.056	25.925	1.00	30.91
ATOM	2829	CE	MET	410	1.737	34.676	27.032	1.00	31.25
ATOM	2830	C	MET	410	4.947	29.794	26.605	1.00	23.26
ATOM	2831	O	MET	410	6.039	29.499	26.125	1.00	21.44
ATOM	2832	N	VAL	411	3.796	29.313	26.151	1.00	22.20
ATOM	2833	CA	VAL	411	3.726	28.381	25.035	1.00	24.32
ATOM	2834	CB	VAL	411	3.045	27.060	25.482	1.00	25.61
ATOM	2835	CG1	VAL	411	2.625	26.248	24.281	1.00	30.37
ATOM	2836	CG2	VAL	411	3.998	26.257	26.354	1.00	25.91
ATOM	2837	C	VAL	411	2.930	28.978	23.875	1.00	23.06
ATOM	2838	O	VAL	411	1.933	29.670	24.087	1.00	23.99
ATOM	2839	N	LYS	412	3.372	28.714	22.649	1.00	22.84
ATOM	2840	CA	LYS	412	2.674	29.220	21.471	1.00	22.52
ATOM	2841	CB	LYS	412	3.616	30.080	20.611	1.00	22.89
ATOM	2842	CG	LYS	412	2.927	30.727	19.405	1.00	23.26
ATOM	2843	CD	LYS	412	3.725	31.898	18.838	1.00	22.53
ATOM	2844	CE	LYS	412	4.979	31.436	18.103	1.00	22.01
ATOM	2845	NZ	LYS	412	4.638	30.645	16.892	1.00	20.94
ATOM	2846	C	LYS	412	2.129	28.056	20.649	1.00	23.26
ATOM	2847	O	LYS	412	2.830	27.071	20.406	1.00	22.79
ATOM	2848	N	ILE	413	0.870	28.170	20.240	1.00	23.60
ATOM	2849	CA	ILE	413	0.212	27.138	19.437	1.00	26.66
ATOM	2850	CB	ILE	413	-0.758	26.291	20.295	1.00	26.12
ATOM	2851	CG2	ILE	413	0.028	25.460	21.299	1.00	26.91
ATOM	2852	CG1	ILE	413	-1.751	27.203	21.020	1.00	28.28
ATOM	2853	CD1	ILE	413	-2.796	26.446	21.830	1.00	24.14
ATOM	2854	C	ILE	413	-0.580	27.747	18.282	1.00	27.66
ATOM	2855	O	ILE	413	-1.152	28.829	18.414	1.00	28.22
ATOM	2856	N	GLU	414	-0.615	27.037	17.158	1.00	29.05
ATOM	2857	CA	GLU	414	-1.318	27.489	15.958	1.00	30.52
ATOM	2858	CB	GLU	414	-0.569	27.025	14.707	1.00	31.51
ATOM	2859	CG	GLU	414	0.834	27.574	14.561	1.00	32.37
ATOM	2860	CD	GLU	414	1.593	26.923	13.416	1.00	33.72
ATOM	2861	OE1	GLU	414	0.951	26.261	12.568	1.00	32.40
ATOM	2862	OE2	GLU	414	2.832	27.082	13.356	1.00	32.46
ATOM	2863	C	GLU	414	-2.743	26.961	15.887	1.00	32.06
ATOM	2864	O	GLU	414	-2.997	25.800	16.201	1.00	33.94
ATOM	2865	N	GLY	415	-3.672	27.809	15.458	1.00	32.73
ATOM	2866	CA	GLY	415	-5.052	27.372	15.345	1.00	33.14
ATOM	2867	C	GLY	415	-6.074	28.431	15.703	1.00	32.54
ATOM	2868	O	GLY	415	-5.744	29.432	16.336	1.00	31.25
ATOM	2869	N	GLY	416	-7.322	28.199	15.302	1.00	33.53
ATOM	2870	CA	GLY	416	-8.386	29.148	15.586	1.00	34.28
ATOM	2871	C	GLY	416	-9.369	28.688	16.650	1.00	35.11
ATOM	2872	O	GLY	416	-8.976	28.275	17.741	1.00	35.72
ATOM	2873	N	GLU	417	-10.656	28.762	16.324	1.00	34.22
ATOM	2874	CA	GLU	417	-11.723	28.370	17.240	1.00	34.97
ATOM	2875	CB	GLU	417	-13.076	28.448	16.527	1.00	38.06
ATOM	2876	CG	GLU	417	-13.709	29.829	16.530	1.00	44.07
ATOM	2877	CD	GLU	417	-14.416	30.149	17.835	1.00	46.62

ATOM	2878	OE1	GLU	417	-13.763	30.094	18.900	1.00	48.75
ATOM	2879	OE2	GLU	417	-15.628	30.457	17.793	1.00	48.44
ATOM	2880	C	GLU	417	-11.576	26.986	17.861	1.00	33.06
ATOM	2881	O	GLU	417	-11.974	26.778	19.008	1.00	31.36
ATOM	2882	N	TRP	418	-11.011	26.041	17.115	1.00	31.17
ATOM	2883	CA	TRP	418	-10.865	24.683	17.632	1.00	30.62
ATOM	2884	CB	TRP	418	-10.427	23.710	16.526	1.00	29.57
ATOM	2885	CG	TRP	418	-8.968	23.794	16.161	1.00	27.67
ATOM	2886	CD2	TRP	418	-7.909	22.968	16.666	1.00	27.03
ATOM	2887	CE2	TRP	418	-6.710	23.410	16.063	1.00	25.39
ATOM	2888	CE3	TRP	418	-7.856	21.901	17.575	1.00	25.44
ATOM	2889	CD1	TRP	418	-8.386	24.674	15.297	1.00	27.61
ATOM	2890	NE1	TRP	418	-7.030	24.449	15.231	1.00	25.85
ATOM	2891	CZ2	TRP	418	-5.471	22.817	16.333	1.00	24.66
ATOM	2892	CZ3	TRP	418	-6.618	21.313	17.843	1.00	24.48
ATOM	2893	CH2	TRP	418	-5.446	21.777	17.225	1.00	24.32
ATOM	2894	C	TRP	418	-9.900	24.568	18.810	1.00	29.99
ATOM	2895	O	TRP	418	-9.793	23.500	19.417	1.00	31.23
ATOM	2896	N	LEU	419	-9.208	25.661	19.131	1.00	26.75
ATOM	2897	CA	LEU	419	-8.244	25.677	20.235	1.00	26.72
ATOM	2898	CB	LEU	419	-6.950	26.371	19.809	1.00	25.59
ATOM	2899	CG	LEU	419	-6.010	25.613	18.872	1.00	26.52
ATOM	2900	CD1	LEU	419	-4.746	26.434	18.644	1.00	25.61
ATOM	2901	CD2	LEU	419	-5.659	24.268	19.488	1.00	23.92
ATOM	2902	C	LEU	419	-8.755	26.355	21.498	1.00	26.45
ATOM	2903	O	LEU	419	-8.051	26.412	22.507	1.00	23.45
ATOM	2904	N	VAL	420	-9.976	26.871	21.442	1.00	25.42
ATOM	2905	CA	VAL	420	-10.562	27.544	22.591	1.00	25.27
ATOM	2906	CB	VAL	420	-12.053	27.865	22.340	1.00	25.27
ATOM	2907	CG1	VAL	420	-12.701	28.408	23.619	1.00	25.70
ATOM	2908	CG2	VAL	420	-12.171	28.891	21.220	1.00	25.05
ATOM	2909	C	VAL	420	-10.434	26.701	23.857	1.00	24.44
ATOM	2910	O	VAL	420	-9.785	27.109	24.819	1.00	24.50
ATOM	2911	N	GLU	421	-11.041	25.520	23.842	1.00	23.25
ATOM	2912	CA	GLU	421	-11.000	24.635	24.999	1.00	23.68
ATOM	2913	CB	GLU	421	-11.659	23.301	24.654	1.00	26.62
ATOM	2914	CG	GLU	421	-11.745	22.350	25.825	1.00	30.68
ATOM	2915	CD	GLU	421	-12.603	21.141	25.526	1.00	32.30
ATOM	2916	OE1	GLU	421	-12.199	20.308	24.688	1.00	32.73
ATOM	2917	OE2	GLU	421	-13.692	21.036	26.129	1.00	36.59
ATOM	2918	C	GLU	421	-9.576	24.393	25.513	1.00	22.94
ATOM	2919	O	GLU	421	-9.320	24.490	26.711	1.00	21.48
ATOM	2920	N	THR	422	-8.660	24.079	24.602	1.00	21.94
ATOM	2921	CA	THR	422	-7.267	23.827	24.952	1.00	20.34
ATOM	2922	CB	THR	422	-6.456	23.462	23.692	1.00	21.24
ATOM	2923	OG1	THR	422	-7.015	22.283	23.103	1.00	20.48
ATOM	2924	CG2	THR	422	-4.991	23.211	24.032	1.00	19.54
ATOM	2925	C	THR	422	-6.634	25.042	25.625	1.00	21.57
ATOM	2926	O	THR	422	-5.871	24.916	26.591	1.00	20.08
ATOM	2927	N	VAL	423	-6.951	26.224	25.109	1.00	22.38
ATOM	2928	CA	VAL	423	-6.420	27.453	25.675	1.00	23.54
ATOM	2929	CB	VAL	423	-6.755	28.672	24.794	1.00	24.18
ATOM	2930	CG1	VAL	423	-6.307	29.955	25.497	1.00	24.10
ATOM	2931	CG2	VAL	423	-6.064	28.540	23.455	1.00	22.31
ATOM	2932	C	VAL	423	-6.973	27.699	27.074	1.00	24.57
ATOM	2933	O	VAL	423	-6.221	28.014	27.994	1.00	24.45
ATOM	2934	N	GLN	424	-8.286	27.554	27.231	1.00	24.53
ATOM	2935	CA	GLN	424	-8.910	27.776	28.529	1.00	25.29
ATOM	2936	CB	GLN	424	-10.429	27.587	28.438	1.00	26.08
ATOM	2937	CG	GLN	424	-11.088	28.337	27.289	1.00	29.30
ATOM	2938	CD	GLN	424	-12.604	28.243	27.319	1.00	31.02
ATOM	2939	OE1	GLN	424	-13.171	27.155	27.423	1.00	27.95
ATOM	2940	NE2	GLN	424	-13.269	29.390	27.220	1.00	33.12
ATOM	2941	C	GLN	424	-8.338	26.819	29.568	1.00	25.02
ATOM	2942	O	GLN	424	-7.998	27.225	30.677	1.00	23.19
ATOM	2943	N	MET	425	-8.216	25.549	29.204	1.00	21.87
ATOM	2944	CA	MET	425	-7.703	24.556	30.135	1.00	22.36
ATOM	2945	CB	MET	425	-8.003	23.155	29.609	1.00	22.27
ATOM	2946	CG	MET	425	-9.484	22.889	29.484	1.00	23.95
ATOM	2947	SD	MET	425	-9.848	21.203	29.002	1.00	24.90
ATOM	2948	CE	MET	425	-9.831	20.377	30.583	1.00	28.11
ATOM	2949	C	MET	425	-6.216	24.707	30.448	1.00	20.61
ATOM	2950	O	MET	425	-5.791	24.450	31.571	1.00	20.01
ATOM	2951	N	LEU	426	-5.426	25.122	29.463	1.00	20.23
ATOM	2952	CA	LEU	426	-3.999	25.315	29.685	1.00	20.83
ATOM	2953	CB	LEU	426	-3.291	25.634	28.366	1.00	18.83
ATOM	2954	CG	LEU	426	-2.789	24.412	27.576	1.00	16.82

ATOM	2955	CD1	LEU	426	-2.321	24.828	26.188	1.00	18.65
ATOM	2956	CD2	LEU	426	-1.642	23.764	28.344	1.00	18.65
ATOM	2957	C	LEU	426	-3.810	26.465	30.668	1.00	24.13
ATOM	2958	O	LEU	426	-2.952	26.411	31.550	1.00	23.47
ATOM	2959	N	THR	427	-4.631	27.498	30.505	1.00	27.30
ATOM	2960	CA	THR	427	-4.594	28.681	31.357	1.00	31.01
ATOM	2961	CB	THR	427	-5.694	29.685	30.957	1.00	31.69
ATOM	2962	OG1	THR	427	-5.486	30.107	29.605	1.00	34.44
ATOM	2963	CG2	THR	427	-5.665	30.903	31.868	1.00	34.25
ATOM	2964	C	THR	427	-4.774	28.340	32.831	1.00	31.38
ATOM	2965	O	THR	427	-3.902	28.627	33.646	1.00	31.24
ATOM	2966	N	GLU	428	-5.905	27.727	33.172	1.00	32.66
ATOM	2967	CA	GLU	428	-6.168	27.375	34.563	1.00	32.58
ATOM	2968	CB	GLU	428	-7.614	26.899	34.741	1.00	33.84
ATOM	2969	CG	GLU	428	-8.107	25.949	33.673	1.00	34.13
ATOM	2970	CD	GLU	428	-9.482	25.377	33.995	1.00	34.03
ATOM	2971	OE1	GLU	428	-10.368	26.145	34.438	1.00	30.96
ATOM	2972	OE2	GLU	428	-9.673	24.162	33.793	1.00	31.63
ATOM	2973	C	GLU	428	-5.206	26.339	35.134	1.00	32.23
ATOM	2974	O	GLU	428	-5.269	26.022	36.320	1.00	32.97
ATOM	2975	N	ARG	429	-4.314	25.816	34.296	1.00	31.00
ATOM	2976	CA	ARG	429	-3.339	24.831	34.753	1.00	27.80
ATOM	2977	CB	ARG	429	-3.372	23.594	33.844	1.00	26.67
ATOM	2978	CG	ARG	429	-4.594	22.731	34.106	1.00	25.42
ATOM	2979	CD	ARG	429	-4.832	21.643	33.064	1.00	21.31
ATOM	2980	NE	ARG	429	-6.072	20.932	33.372	1.00	20.15
ATOM	2981	CZ	ARG	429	-7.270	21.513	33.413	1.00	19.59
ATOM	2982	NH1	ARG	429	-7.396	22.805	33.157	1.00	19.16
ATOM	2983	NH2	ARG	429	-8.340	20.815	33.736	1.00	18.53
ATOM	2984	C	ARG	429	-1.930	25.423	34.825	1.00	28.16
ATOM	2985	O	ARG	429	-0.934	24.708	34.728	1.00	27.12
ATOM	2986	N	ALA	430	-1.865	26.742	34.990	1.00	29.24
ATOM	2987	CA	ALA	430	-0.600	27.464	35.109	1.00	29.49
ATOM	2988	CB	ALA	430	0.233	26.864	36.237	1.00	29.80
ATOM	2989	C	ALA	430	0.239	27.544	33.834	1.00	29.79
ATOM	2990	O	ALA	430	1.468	27.521	33.900	1.00	30.37
ATOM	2991	N	VAL	431	-0.409	27.641	32.676	1.00	29.07
ATOM	2992	CA	VAL	431	0.332	27.738	31.420	1.00	27.53
ATOM	2993	CB	VAL	431	0.279	26.405	30.623	1.00	27.98
ATOM	2994	CG1	VAL	431	1.073	26.545	29.327	1.00	27.45
ATOM	2995	CG2	VAL	431	0.848	25.274	31.457	1.00	25.30
ATOM	2996	C	VAL	431	-0.175	28.866	30.522	1.00	27.45
ATOM	2997	O	VAL	431	-1.231	28.750	29.894	1.00	27.25
ATOM	2998	N	PRO	432	0.570	29.986	30.460	1.00	26.79
ATOM	2999	CD	PRO	432	1.831	30.287	31.155	1.00	26.11
ATOM	3000	CA	PRO	432	0.159	31.115	29.617	1.00	26.19
ATOM	3001	CB	PRO	432	1.135	32.218	30.017	1.00	27.09
ATOM	3002	CG	PRO	432	2.360	31.452	30.362	1.00	29.57
ATOM	3003	C	PRO	432	0.285	30.715	28.152	1.00	24.89
ATOM	3004	O	PRO	432	1.205	29.987	27.775	1.00	24.44
ATOM	3005	N	VAL	433	-0.642	31.192	27.333	1.00	23.55
ATOM	3006	CA	VAL	433	-0.653	30.841	25.924	1.00	22.49
ATOM	3007	CB	VAL	433	-1.895	29.990	25.592	1.00	20.80
ATOM	3008	CG1	VAL	433	-1.915	29.640	24.111	1.00	21.86
ATOM	3009	CG2	VAL	433	-1.896	28.726	26.449	1.00	19.73
ATOM	3010	C	VAL	433	-0.633	32.030	24.980	1.00	24.12
ATOM	3011	O	VAL	433	-1.244	33.068	25.244	1.00	22.28
ATOM	3012	N	CYS	434	0.091	31.850	23.880	1.00	25.46
ATOM	3013	CA	CYS	434	0.206	32.841	22.820	1.00	26.20
ATOM	3014	CB	CYS	434	1.675	33.159	22.543	1.00	27.30
ATOM	3015	SG	CYS	434	1.936	34.229	21.110	1.00	29.19
ATOM	3016	C	CYS	434	-0.416	32.197	21.585	1.00	27.10
ATOM	3017	O	CYS	434	0.010	31.123	21.165	1.00	27.48
ATOM	3018	N	GLY	435	-1.428	32.842	21.019	1.00	25.59
ATOM	3019	CA	GLY	435	-2.078	32.298	19.842	1.00	27.29
ATOM	3020	C	GLY	435	-1.269	32.541	18.586	1.00	27.32
ATOM	3021	O	GLY	435	-0.237	33.211	18.629	1.00	26.82
ATOM	3022	N	HIS	436	-1.737	32.005	17.463	1.00	27.79
ATOM	3023	CA	HIS	436	-1.037	32.164	16.195	1.00	28.13
ATOM	3024	CB	HIS	436	0.117	31.158	16.128	1.00	28.29
ATOM	3025	CG	HIS	436	1.044	31.362	14.970	1.00	29.67
ATOM	3026	CD2	HIS	436	0.893	32.043	13.809	1.00	28.18
ATOM	3027	ND1	HIS	436	2.298	30.792	14.918	1.00	28.22
ATOM	3028	CE1	HIS	436	2.878	31.110	13.775	1.00	29.12
ATOM	3029	NE2	HIS	436	2.046	31.868	13.083	1.00	27.13
ATOM	3030	C	HIS	436	-2.008	31.950	15.039	1.00	29.59
ATOM	3031	O	HIS	436	-2.356	30.817	14.708	1.00	27.47

ATOM	3032	N	LEU	437	-2.442	33.052	14.428	1.00	30.59
ATOM	3033	CA	LEU	437	-3.384	32.999	13.314	1.00	31.59
ATOM	3034	CB	LEU	437	-4.632	33.823	13.643	1.00	31.44
ATOM	3035	CG	LEU	437	-5.519	33.332	14.790	1.00	30.60
ATOM	3036	CD1	LEU	437	-6.611	34.351	15.065	1.00	30.46
ATOM	3037	CD2	LEU	437	-6.124	31.978	14.429	1.00	30.85
ATOM	3038	C	LEU	437	-2.771	33.507	12.015	1.00	32.51
ATOM	3039	O	LEU	437	-1.758	34.204	12.024	1.00	32.44
ATOM	3040	N	GLY	438	-3.399	33.154	10.898	1.00	34.06
ATOM	3041	CA	GLY	438	-2.905	33.587	9.606	1.00	35.62
ATOM	3042	C	GLY	438	-2.283	32.452	8.825	1.00	37.37
ATOM	3043	O	GLY	438	-2.896	31.400	8.641	1.00	37.17
ATOM	3044	N	LEU	439	-1.055	32.659	8.366	1.00	38.61
ATOM	3045	CA	LEU	439	-0.355	31.642	7.601	1.00	39.93
ATOM	3046	CB	LEU	439	0.623	32.310	6.630	1.00	42.55
ATOM	3047	CG	LEU	439	1.104	31.510	5.414	1.00	44.13
ATOM	3048	CD1	LEU	439	1.964	32.410	4.533	1.00	45.83
ATOM	3049	CD2	LEU	439	1.889	30.288	5.858	1.00	43.74
ATOM	3050	C	LEU	439	0.388	30.719	8.567	1.00	40.30
ATOM	3051	O	LEU	439	1.549	30.957	8.902	1.00	40.50
ATOM	3052	N	THR	440	-0.302	29.675	9.020	1.00	39.46
ATOM	3053	CA	THR	440	0.267	28.700	9.947	1.00	38.93
ATOM	3054	CB	THR	440	-0.847	27.967	10.717	1.00	39.18
ATOM	3055	OG1	THR	440	-1.763	27.374	9.787	1.00	38.96
ATOM	3056	CG2	THR	440	-1.600	28.938	11.612	1.00	37.57
ATOM	3057	C	THR	440	1.108	27.677	9.181	1.00	38.59
ATOM	3058	O	THR	440	0.572	26.785	8.522	1.00	38.96
ATOM	3059	N	PRO	441	2.444	27.791	9.270	1.00	37.45
ATOM	3060	CD	PRO	441	3.166	28.736	10.142	1.00	37.29
ATOM	3061	CA	PRO	441	3.378	26.891	8.586	1.00	36.21
ATOM	3062	CB	PRO	441	4.747	27.433	8.998	1.00	36.37
ATOM	3063	CG	PRO	441	4.485	28.045	10.332	1.00	39.17
ATOM	3064	C	PRO	441	3.205	25.400	8.882	1.00	34.87
ATOM	3065	O	PRO	441	3.548	24.558	8.050	1.00	33.70
ATOM	3066	N	GLN	442	2.677	25.069	10.058	1.00	33.93
ATOM	3067	CA	GLN	442	2.453	23.668	10.406	1.00	32.20
ATOM	3068	CB	GLN	442	1.991	23.542	11.863	1.00	31.74
ATOM	3069	CG	GLN	442	3.122	23.343	12.873	1.00	29.51
ATOM	3070	CD	GLN	442	2.644	23.472	14.312	1.00	29.21
ATOM	3071	OE1	GLN	442	1.579	22.972	14.670	1.00	27.25
ATOM	3072	NE2	GLN	442	3.436	24.136	15.145	1.00	28.44
ATOM	3073	C	GLN	442	1.406	23.052	9.472	1.00	31.45
ATOM	3074	O	GLN	442	1.423	21.848	9.215	1.00	30.71
ATOM	3075	N	SER	443	0.500	23.885	8.965	1.00	30.60
ATOM	3076	CA	SER	443	-0.546	23.420	8.058	1.00	31.30
ATOM	3077	CB	SER	443	-1.881	24.089	8.394	1.00	31.62
ATOM	3078	OG	SER	443	-2.343	23.707	9.680	1.00	32.96
ATOM	3079	C	SER	443	-0.188	23.711	6.603	1.00	30.60
ATOM	3080	O	SER	443	-1.070	23.829	5.751	1.00	29.98
ATOM	3081	N	VAL	444	1.109	23.818	6.323	1.00	29.83
ATOM	3082	CA	VAL	444	1.590	24.101	4.970	1.00	29.28
ATOM	3083	CB	VAL	444	3.143	24.079	4.909	1.00	30.47
ATOM	3084	CG1	VAL	444	3.670	22.706	5.307	1.00	28.85
ATOM	3085	CG2	VAL	444	3.616	24.440	3.504	1.00	30.63
ATOM	3086	C	VAL	444	1.039	23.101	3.952	1.00	30.00
ATOM	3087	O	VAL	444	0.718	23.466	2.819	1.00	30.16
ATOM	3088	N	ASN	445	0.925	21.842	4.361	1.00	28.62
ATOM	3089	CA	ASN	445	0.412	20.804	3.478	1.00	27.90
ATOM	3090	CB	ASN	445	0.666	19.425	4.089	1.00	26.96
ATOM	3091	CG	ASN	445	2.141	19.128	4.245	1.00	28.30
ATOM	3092	OD1	ASN	445	2.868	19.009	3.257	1.00	30.31
ATOM	3093	ND2	ASN	445	2.598	19.023	5.488	1.00	28.01
ATOM	3094	C	ASN	445	-1.073	20.991	3.203	1.00	27.73
ATOM	3095	O	ASN	445	-1.575	20.566	2.165	1.00	25.69
ATOM	3096	N	ILE	446	-1.767	21.632	4.138	1.00	29.28
ATOM	3097	CA	ILE	446	-3.196	21.890	3.993	1.00	31.96
ATOM	3098	CB	ILE	446	-3.836	22.319	5.335	1.00	31.98
ATOM	3099	CG2	ILE	446	-5.264	22.799	5.105	1.00	31.16
ATOM	3100	CG1	ILE	446	-3.814	21.153	6.331	1.00	30.13
ATOM	3101	CD1	ILE	446	-4.670	19.979	5.928	1.00	31.79
ATOM	3102	C	ILE	446	-3.411	23.007	2.982	1.00	34.41
ATOM	3103	O	ILE	446	-4.239	22.889	2.080	1.00	33.82
ATOM	3104	N	PHE	447	-2.657	24.092	3.142	1.00	36.64
ATOM	3105	CA	PHE	447	-2.763	25.245	2.249	1.00	39.97
ATOM	3106	CB	PHE	447	-2.040	26.452	2.852	1.00	39.70
ATOM	3107	CG	PHE	447	-2.516	26.826	4.228	1.00	40.98
ATOM	3108	CD1	PHE	447	-3.860	27.100	4.467	1.00	41.63

ATOM	3109	CD2	PHE	447	-1.613	26.931	5.282	1.00	41.49
ATOM	3110	CE1	PHE	447	-4.299	27.474	5.738	1.00	41.71
ATOM	3111	CE2	PHE	447	-2.040	27.304	6.557	1.00	41.93
ATOM	3112	CZ	PHE	447	-3.388	27.577	6.785	1.00	42.08
ATOM	3113	C	PHE	447	-2.170	24.948	0.874	1.00	42.08
ATOM	3114	O	PHE	447	-2.536	25.579	-0.121	1.00	42.68
ATOM	3115	N	GLY	448	-1.251	23.987	0.831	1.00	43.71
ATOM	3116	CA	GLY	448	-0.608	23.622	-0.418	1.00	45.97
ATOM	3117	C	GLY	448	0.576	24.528	-0.695	1.00	47.94
ATOM	3118	O	GLY	448	0.963	24.729	-1.846	1.00	48.22
ATOM	3119	N	GLY	449	1.150	25.076	0.371	1.00	49.19
ATOM	3120	CA	GLY	449	2.285	25.969	0.239	1.00	50.57
ATOM	3121	C	GLY	449	2.149	27.142	1.191	1.00	51.89
ATOM	3122	O	GLY	449	1.263	27.148	2.047	1.00	51.79
ATOM	3123	N	TYR	450	3.020	28.137	1.048	1.00	53.06
ATOM	3124	CA	TYR	450	2.970	29.311	1.912	1.00	54.66
ATOM	3125	CB	TYR	450	4.375	29.674	2.397	1.00	54.86
ATOM	3126	CG	TYR	450	5.085	28.537	3.093	1.00	55.77
ATOM	3127	CD1	TYR	450	5.758	27.559	2.362	1.00	55.77
ATOM	3128	CE1	TYR	450	6.387	26.490	2.996	1.00	56.62
ATOM	3129	CD2	TYR	450	5.057	28.420	4.482	1.00	55.92
ATOM	3130	CE2	TYR	450	5.681	27.354	5.128	1.00	56.38
ATOM	3131	CZ	TYR	450	6.344	26.392	4.378	1.00	56.70
ATOM	3132	OH	TYR	450	6.958	25.329	5.008	1.00	56.18
ATOM	3133	C	TYR	450	2.346	30.493	1.178	1.00	55.36
ATOM	3134	O	TYR	450	3.036	31.265	0.513	1.00	55.48
ATOM	3135	N	LYS	451	1.031	30.625	1.311	1.00	56.14
ATOM	3136	CA	LYS	451	0.291	31.695	0.659	1.00	56.56
ATOM	3137	CB	LYS	451	-0.833	31.099	-0.189	1.00	57.29
ATOM	3138	CG	LYS	451	-0.410	29.887	-1.008	1.00	57.70
ATOM	3139	CD	LYS	451	-1.613	29.188	-1.621	1.00	58.82
ATOM	3140	CE	LYS	451	-1.232	27.840	-2.215	1.00	58.93
ATOM	3141	NZ	LYS	451	-2.426	27.115	-2.731	1.00	58.99
ATOM	3142	C	LYS	451	-0.296	32.626	1.714	1.00	56.60
ATOM	3143	O	LYS	451	-0.542	32.216	2.849	1.00	56.17
ATOM	3144	N	VAL	452	-0.521	33.879	1.333	1.00	56.36
ATOM	3145	CA	VAL	452	-1.079	34.868	2.245	1.00	56.35
ATOM	3146	CB	VAL	452	-0.945	36.297	1.667	1.00	56.62
ATOM	3147	CG1	VAL	452	-1.394	37.322	2.696	1.00	56.98
ATOM	3148	CG2	VAL	452	0.491	36.553	1.247	1.00	56.04
ATOM	3149	C	VAL	452	-2.557	34.591	2.514	1.00	56.29
ATOM	3150	O	VAL	452	-3.383	34.631	1.600	1.00	56.01
ATOM	3151	N	GLN	453	-2.880	34.304	3.772	1.00	56.06
ATOM	3152	CA	GLN	453	-4.258	34.036	4.166	1.00	56.41
ATOM	3153	CB	GLN	453	-4.303	33.044	5.334	1.00	56.31
ATOM	3154	CG	GLN	453	-4.304	31.574	4.926	1.00	56.61
ATOM	3155	CD	GLN	453	-3.011	31.138	4.268	1.00	57.19
ATOM	3156	OE1	GLN	453	-1.934	31.255	4.854	1.00	57.65
ATOM	3157	NE2	GLN	453	-3.111	30.624	3.048	1.00	55.74
ATOM	3158	C	GLN	453	-4.965	35.327	4.565	1.00	56.38
ATOM	3159	O	GLN	453	-4.333	36.375	4.704	1.00	55.54
ATOM	3160	N	GLY	454	-6.281	35.244	4.746	1.00	56.76
ATOM	3161	CA	GLY	454	-7.053	36.413	5.127	1.00	57.88
ATOM	3162	C	GLY	454	-7.627	37.165	3.940	1.00	58.46
ATOM	3163	O	GLY	454	-8.382	38.120	4.115	1.00	58.43
ATOM	3164	N	ARG	455	-7.267	36.735	2.733	1.00	59.53
ATOM	3165	CA	ARG	455	-7.750	37.371	1.509	1.00	61.02
ATOM	3166	CB	ARG	455	-7.081	36.737	0.283	1.00	61.22
ATOM	3167	CG	ARG	455	-5.603	37.080	0.120	1.00	61.34
ATOM	3168	CD	ARG	455	-5.416	38.532	-0.305	1.00	61.58
ATOM	3169	NE	ARG	455	-4.023	38.979	-0.232	1.00	61.55
ATOM	3170	CZ	ARG	455	-3.013	38.444	-0.914	1.00	60.83
ATOM	3171	NH1	ARG	455	-3.224	37.425	-1.736	1.00	60.33
ATOM	3172	NH2	ARG	455	-1.788	38.935	-0.778	1.00	60.86
ATOM	3173	C	ARG	455	-9.268	37.252	1.387	1.00	61.98
ATOM	3174	O	ARG	455	-9.805	36.157	1.214	1.00	61.66
ATOM	3175	N	GLY	456	-9.955	38.387	1.482	1.00	62.93
ATOM	3176	CA	GLY	456	-11.402	38.386	1.379	1.00	64.13
ATOM	3177	C	GLY	456	-12.084	38.769	2.678	1.00	65.08
ATOM	3178	O	GLY	456	-11.445	38.843	3.728	1.00	65.12
ATOM	3179	N	ASP	457	-13.388	39.016	2.606	1.00	65.45
ATOM	3180	CA	ASP	457	-14.162	39.392	3.783	1.00	65.79
ATOM	3181	CB	ASP	457	-15.457	40.094	3.365	1.00	66.87
ATOM	3182	CG	ASP	457	-15.205	41.358	2.565	1.00	67.41
ATOM	3183	OD1	ASP	457	-14.544	42.277	3.095	1.00	67.49
ATOM	3184	OD2	ASP	457	-15.668	41.432	1.407	1.00	68.24
ATOM	3185	C	ASP	457	-14.494	38.159	4.616	1.00	65.50

ATOM	3186	O	ASP	457	-14.485	38.208	5.846	1.00	65.44
ATOM	3187	N	GLU	458	-14.788	37.055	3.936	1.00	65.17
ATOM	3188	CA	GLU	458	-15.122	35.808	4.611	1.00	64.76
ATOM	3189	CB	GLU	458	-15.460	34.726	3.583	1.00	65.72
ATOM	3190	CG	GLU	458	-15.856	33.392	4.194	1.00	67.79
ATOM	3191	CD	GLU	458	-16.235	32.360	3.149	1.00	68.91
ATOM	3192	OE1	GLU	458	-17.201	32.605	2.394	1.00	69.70
ATOM	3193	OE2	GLU	458	-15.568	31.305	3.083	1.00	69.17
ATOM	3194	C	GLU	458	-13.956	35.348	5.480	1.00	63.98
ATOM	3195	O	GLU	458	-14.115	35.121	6.681	1.00	63.71
ATOM	3196	N	ALA	459	-12.785	35.213	4.866	1.00	62.74
ATOM	3197	CA	ALA	459	-11.588	34.787	5.581	1.00	61.25
ATOM	3198	CB	ALA	459	-10.462	34.507	4.594	1.00	61.27
ATOM	3199	C	ALA	459	-11.159	35.863	6.575	1.00	60.06
ATOM	3200	O	ALA	459	-10.630	35.560	7.645	1.00	59.75
ATOM	3201	N	GLY	460	-11.392	37.119	6.212	1.00	58.46
ATOM	3202	CA	GLY	460	-11.029	38.218	7.083	1.00	57.13
ATOM	3203	C	GLY	460	-11.808	38.207	8.384	1.00	56.78
ATOM	3204	O	GLY	460	-11.220	38.275	9.463	1.00	56.93
ATOM	3205	N	ASP	461	-13.132	38.118	8.290	1.00	55.32
ATOM	3206	CA	ASP	461	-13.974	38.101	9.481	1.00	54.77
ATOM	3207	CB	ASP	461	-15.455	38.211	9.099	1.00	55.32
ATOM	3208	CG	ASP	461	-15.783	39.512	8.386	1.00	56.16
ATOM	3209	OD1	ASP	461	-15.440	40.593	8.913	1.00	56.40
ATOM	3210	OD2	ASP	461	-16.395	39.452	7.301	1.00	56.69
ATOM	3211	C	ASP	461	-13.753	36.825	10.287	1.00	53.74
ATOM	3212	O	ASP	461	-13.998	36.792	11.491	1.00	53.31
ATOM	3213	N	GLN	462	-13.290	35.776	9.614	1.00	53.09
ATOM	3214	CA	GLN	462	-13.034	34.500	10.268	1.00	52.15
ATOM	3215	CB	GLN	462	-12.908	33.387	9.228	1.00	51.74
ATOM	3216	CG	GLN	462	-12.684	32.009	9.826	1.00	51.57
ATOM	3217	CD	GLN	462	-13.729	31.655	10.865	1.00	52.18
ATOM	3218	OE1	GLN	462	-14.930	31.725	10.604	1.00	51.90
ATOM	3219	NE2	GLN	462	-13.275	31.268	12.053	1.00	52.39
ATOM	3220	C	GLN	462	-11.767	34.567	11.108	1.00	51.68
ATOM	3221	O	GLN	462	-11.647	33.878	12.121	1.00	52.10
ATOM	3222	N	LEU	463	-10.819	35.397	10.686	1.00	51.14
ATOM	3223	CA	LEU	463	-9.567	35.552	11.419	1.00	50.31
ATOM	3224	CB	LEU	463	-8.478	36.116	10.507	1.00	51.43
ATOM	3225	CG	LEU	463	-8.036	35.227	9.343	1.00	52.52
ATOM	3226	CD1	LEU	463	-6.962	35.949	8.542	1.00	53.49
ATOM	3227	CD2	LEU	463	-7.505	33.901	9.872	1.00	53.21
ATOM	3228	C	LEU	463	-9.769	36.480	12.603	1.00	49.29
ATOM	3229	O	LEU	463	-9.162	36.295	13.656	1.00	49.00
ATOM	3230	N	LEU	464	-10.622	37.483	12.424	1.00	48.83
ATOM	3231	CA	LEU	464	-10.907	38.439	13.488	1.00	48.51
ATOM	3232	CB	LEU	464	-11.724	39.613	12.939	1.00	48.82
ATOM	3233	CG	LEU	464	-11.609	40.957	13.668	1.00	50.56
ATOM	3234	CD1	LEU	464	-12.492	41.976	12.960	1.00	50.81
ATOM	3235	CD2	LEU	464	-12.017	40.827	15.126	1.00	49.90
ATOM	3236	C	LEU	464	-11.697	37.725	14.582	1.00	46.83
ATOM	3237	O	LEU	464	-11.471	37.950	15.772	1.00	46.51
ATOM	3238	N	SER	465	-12.626	36.867	14.165	1.00	45.83
ATOM	3239	CA	SER	465	-13.452	36.104	15.095	1.00	44.66
ATOM	3240	CB	SER	465	-14.506	35.295	14.335	1.00	45.80
ATOM	3241	OG	SER	465	-15.284	34.505	15.225	1.00	45.26
ATOM	3242	C	SER	465	-12.576	35.156	15.900	1.00	43.62
ATOM	3243	O	SER	465	-12.702	35.072	17.119	1.00	43.30
ATOM	3244	N	ASP	466	-11.700	34.435	15.205	1.00	41.72
ATOM	3245	CA	ASP	466	-10.796	33.503	15.867	1.00	40.59
ATOM	3246	CB	ASP	466	-9.941	32.742	14.847	1.00	40.56
ATOM	3247	CG	ASP	466	-10.730	31.693	14.086	1.00	41.88
ATOM	3248	OD1	ASP	466	-11.651	31.083	14.674	1.00	43.44
ATOM	3249	OD2	ASP	466	-10.418	31.458	12.902	1.00	41.17
ATOM	3250	C	ASP	466	-9.885	34.265	16.817	1.00	38.59
ATOM	3251	O	ASP	466	-9.566	33.780	17.900	1.00	37.69
ATOM	3252	N	ALA	467	-9.472	35.460	16.408	1.00	37.24
ATOM	3253	CA	ALA	467	-8.596	36.291	17.226	1.00	36.59
ATOM	3254	CB	ALA	467	-8.232	37.568	16.472	1.00	35.34
ATOM	3255	C	ALA	467.	-9.284	36.635	18.541	1.00	36.59
ATOM	3256	O	ALA	467	-8.707	36.477	19.616	1.00	36.56
ATOM	3257	N	LEU	468	-10.520	37.116	18.450	1.00	36.29
ATOM	3258	CA	LEU	468	-11.283	37.465	19.643	1.00	36.13
ATOM	3259	CB	LEU	468	-12.610	38.119	19.254	1.00	36.56
ATOM	3260	CG	LEU	468	-12.551	39.555	18.732	1.00	38.68
ATOM	3261	CD1	LEU	468	-13.871	39.910	18.062	1.00	40.41
ATOM	3262	CD2	LEU	468	-12.248	40.501	19.884	1.00	38.41

ATOM	3263	C	LEU	468	-11.559	36.204	20.452	1.00	35.67
ATOM	3264	O	LEU	468	-11.565	36.232	21.683	1.00	36.76
ATOM	3265	N	ALA	469	-11.788	35.099	19.747	1.00	34.59
ATOM	3266	CA	ALA	469	-12.077	33.820	20.387	1.00	34.17
ATOM	3267	CB	ALA	469	-12.370	32.768	19.332	1.00	33.45
ATOM	3268	C	ALA	469	-10.917	33.370	21.269	1.00	34.41
ATOM	3269	O	ALA	469	-11.101	33.073	22.453	1.00	33.82
ATOM	3270	N	LEU	470	-9.725	33.315	20.685	1.00	33.79
ATOM	3271	CA	LEU	470	-8.534	32.911	21.420	1.00	34.13
ATOM	3272	CB	LEU	470	-7.297	32.981	20.516	1.00	33.55
ATOM	3273	CG	LEU	470	-7.261	32.030	19.317	1.00	32.57
ATOM	3274	CD1	LEU	470	-6.006	32.282	18.490	1.00	32.93
ATOM	3275	CD2	LEU	470	-7.289	30.589	19.803	1.00	32.13
ATOM	3276	C	LEU	470	-8.347	33.816	22.627	1.00	34.20
ATOM	3277	O	LEU	470	-8.061	33.347	23.732	1.00	34.77
ATOM	3278	N	GLU	471	-8.516	35.119	22.417	1.00	33.48
ATOM	3279	CA	GLU	471	-8.373	36.085	23.499	1.00	33.79
ATOM	3280	CB	GLU	471	-8.594	37.506	22.978	1.00	34.37
ATOM	3281	CG	GLU	471	-8.617	38.553	24.080	1.00	35.68
ATOM	3282	CD	GLU	471	-8.985	39.930	23.565	1.00	36.13
ATOM	3283	OE1	GLU	471	-10.028	40.055	22.881	1.00	36.43
ATOM	3284	OE2	GLU	471	-8.233	40.884	23.851	1.00	35.43
ATOM	3285	C	GLU	471	-9.376	35.796	24.613	1.00	33.42
ATOM	3286	O	GLU	471	-9.022	35.778	25.793	1.00	32.79
ATOM	3287	N	ALA	472	-10.631	35.584	24.232	1.00	33.45
ATOM	3288	CA	ALA	472	-11.672	35.291	25.209	1.00	32.67
ATOM	3289	CB	ALA	472	-13.019	35.130	24.506	1.00	32.92
ATOM	3290	C	ALA	472	-11.308	34.015	25.963	1.00	32.35
ATOM	3291	O	ALA	472	-11.559	33.900	27.163	1.00	31.64
ATOM	3292	N	ALA	473	-10.702	33.067	25.252	1.00	31.77
ATOM	3293	CA	ALA	473	-10.297	31.790	25.840	1.00	32.34
ATOM	3294	CB	ALA	473	-9.802	30.850	24.743	1.00	32.34
ATOM	3295	C	ALA	473	-9.222	31.946	26.915	1.00	32.08
ATOM	3296	O	ALA	473	-9.133	31.132	27.835	1.00	32.20
ATOM	3297	N	GLY	474	-8.401	32.987	26.793	1.00	32.17
ATOM	3298	CA	GLY	474	-7.352	33.217	27.774	1.00	32.43
ATOM	3299	C	GLY	474	-5.991	33.553	27.182	1.00	33.77
ATOM	3300	O	GLY	474	-5.027	33.776	27.916	1.00	32.28
ATOM	3301	N	ALA	475	-5.905	33.589	25.856	1.00	34.78
ATOM	3302	CA	ALA	475	-4.646	33.905	25.189	1.00	36.82
ATOM	3303	CB	ALA	475	-4.820	33.850	23.679	1.00	37.72
ATOM	3304	C	ALA	475	-4.170	35.289	25.608	1.00	38.74
ATOM	3305	O	ALA	475	-4.896	36.276	25.466	1.00	38.36
ATOM	3306	N	GLN	476	-2.947	35.354	26.124	1.00	39.30
ATOM	3307	CA	GLN	476	-2.370	36.618	26.573	1.00	41.42
ATOM	3308	CB	GLN	476	-1.484	36.378	27.798	1.00	42.23
ATOM	3309	CG	GLN	476	-2.195	35.668	28.940	1.00	44.93
ATOM	3310	CD	GLN	476	-1.408	35.724	30.234	1.00	46.68
ATOM	3311	OE1	GLN	476	-1.176	36.802	30.780	1.00	48.89
ATOM	3312	NE2	GLN	476	-0.992	34.564	30.732	1.00	47.84
ATOM	3313	C	GLN	476	-1.561	37.296	25.468	1.00	41.29
ATOM	3314	O	GLN	476	-1.171	38.459	25.590	1.00	40.99
ATOM	3315	N	LEU	477	-1.320	36.558	24.389	1.00	40.91
ATOM	3316	CA	LEU	477	-0.565	37.058	23.247	1.00	39.33
ATOM	3317	CB	LEU	477	0.915	36.716	23.395	1.00	41.45
ATOM	3318	CG	LEU	477	1.785	37.738	24.121	1.00	41.89
ATOM	3319	CD1	LEU	477	3.142	37.133	24.420	1.00	42.32
ATOM	3320	CD2	LEU	477	1.927	38.977	23.252	1.00	43.54
ATOM	3321	C	LEU	477	-1.086	36.455	21.953	1.00	38.33
ATOM	3322	O	LEU	477	-1.714	35.400	21.964	1.00	36.02
ATOM	3323	N	LEU	478	-0.820	37.130	20.840	1.00	37.63
ATOM	3324	CA	LEU	478	-1.258	36.659	19.533	1.00	38.87
ATOM	3325	CB	LEU	478	-2.600	37.288	19.158	1.00	38.65
ATOM	3326	CG	LEU	478	-3.100	36.978	17.748	1.00	40.05
ATOM	3327	CD1	LEU	478	-3.361	35.488	17.611	1.00	39.92
ATOM	3328	CD2	LEU	478	-4.369	37.771	17.467	1.00	40.39
ATOM	3329	C	LEU	478	-0.227	37.002	18.465	1.00	38.90
ATOM	3330	O	LEU	478	0.424	38.047	18.528	1.00	39.77
ATOM	3331	N	VAL	479	-0.084	36.120	17.483	1.00	38.07
ATOM	3332	CA	VAL	479	0.862	36.337	16.402	1.00	37.86
ATOM	3333	CB	VAL	479	2.033	35.332	16.478	1.00	37.71
ATOM	3334	CG1	VAL	479	2.952	35.503	15.284	1.00	37.57
ATOM	3335	CG2	VAL	479	2.808	35.537	17.771	1.00	37.24
ATOM	3336	C	VAL	479	0.174	36.200	15.049	1.00	39.03
ATOM	3337	O	VAL	479	-0.453	35.176	14.760	1.00	37.57
ATOM	3338	N	LEU	480	0.282	37.246	14.231	1.00	38.25
ATOM	3339	CA	LEU	480	-0.307	37.251	12.893	1.00	38.69

ATOM	3340	CB	LEU	480	-1.029	38.574	12.622	1.00	39.15
ATOM	3341	CG	LEU	480	-2.307	38.841	13.418	1.00	39.59
ATOM	3342	CD1	LEU	480	-2.851	40.220	13.071	1.00	39.86
ATOM	3343	CD2	LEU	480	-3.340	37.766	13.098	1.00	40.86
ATOM	3344	C	LEU	480	0.816	37.067	11.884	1.00	38.26
ATOM	3345	O	LEU	480	1.818	37.776	11.935	1.00	37.03
ATOM	3346	N	GLU	481	0.648	36.115	10.972	1.00	38.45
ATOM	3347	CA	GLU	481	1.670	35.846	9.967	1.00	38.65
ATOM	3348	CB	GLU	481	2.287	34.469	10.204	1.00	38.33
ATOM	3349	CG	GLU	481	3.587	34.243	9.454	1.00	39.77
ATOM	3350	CD	GLU	481	4.111	32.833	9.611	1.00	38.78
ATOM	3351	OE1	GLU	481	4.045	32.300	10.741	1.00	36.25
ATOM	3352	OE2	GLU	481	4.597	32.266	8.605	1.00	39.84
ATOM	3353	C	GLU	481	1.123	35.914	8.546	1.00	39.06
ATOM	3354	O	GLU	481	0.152	35.234	8.209	1.00	37.10
ATOM	3355	N	CYS	482	1.768	36.732	7.719	1.00	41.00
ATOM	3356	CA	CYS	482	1.384	36.918	6.323	1.00	42.86
ATOM	3357	CB	CYS	482	1.841	35.721	5.490	1.00	42.97
ATOM	3358	SG	CYS	482	3.640	35.526	5.444	1.00	44.40
ATOM	3359	C	CYS	482	-0.110	37.139	6.142	1.00	43.47
ATOM	3360	O	CYS	482	-0.829	36.260	5.664	1.00	44.42
ATOM	3361	N	VAL	483	-0.564	38.327	6.524	1.00	45.25
ATOM	3362	CA	VAL	483	-1.969	38.697	6.411	1.00	47.42
ATOM	3363	CB	VAL	483	-2.682	38.573	7.783	1.00	47.80
ATOM	3364	CG1	VAL	483	-2.199	39.655	8.730	1.00	47.74
ATOM	3365	CG2	VAL	483	-4.182	38.643	7.603	1.00	48.49
ATOM	3366	C	VAL	483	-2.053	40.143	5.915	1.00	48.82
ATOM	3367	O	VAL	483	-1.243	40.987	6.304	1.00	49.32
ATOM	3368	N	PRO	484	-3.027	40.449	5.042	1.00	49.61
ATOM	3369	CD	PRO	484	-4.159	39.629	4.579	1.00	50.26
ATOM	3370	CA	PRO	484	-3.143	41.822	4.541	1.00	49.54
ATOM	3371	CB	PRO	484	-4.459	41.797	3.758	1.00	49.60
ATOM	3372	CG	PRO	484	-5.229	40.670	4.391	1.00	50.57
ATOM	3373	C	PRO	484	-3.138	42.850	5.666	1.00	49.40
ATOM	3374	O	PRO	484	-3.852	42.703	6.656	1.00	49.27
ATOM	3375	N	VAL	485	-2.317	43.884	5.504	1.00	49.36
ATOM	3376	CA	VAL	485	-2.184	44.942	6.500	1.00	49.33
ATOM	3377	CB	VAL	485	-1.436	46.156	5.915	1.00	48.81
ATOM	3378	CG1	VAL	485	-1.169	47.171	7.006	1.00	49.88
ATOM	3379	CG2	VAL	485	-0.134	45.707	5.273	1.00	49.01
ATOM	3380	C	VAL	485	-3.532	45.415	7.034	1.00	50.17
ATOM	3381	O	VAL	485	-3.732	45.505	8.248	1.00	49.86
ATOM	3382	N	GLU	486	-4.454	45.715	6.124	1.00	50.05
ATOM	3383	CA	GLU	486	-5.784	46.183	6.504	1.00	50.38
ATOM	3384	CB	GLU	486	-6.644	46.421	5.254	1.00	51.37
ATOM	3385	CG	GLU	486	-6.277	45.568	4.041	1.00	52.69
ATOM	3386	CD	GLU	486	-5.076	46.115	3.277	1.00	53.84
ATOM	3387	OE1	GLU	486	-5.120	47.296	2.872	1.00	54.68
ATOM	3388	OE2	GLU	486	-4.096	45.365	3.074	1.00	52.54
ATOM	3389	C	GLU	486	-6.503	45.228	7.456	1.00	50.03
ATOM	3390	O	GLU	486	-7.304	45.656	8.292	1.00	48.95
ATOM	3391	N	LEU	487	-6.215	43.936	7.330	1.00	49.68
ATOM	3392	CA	LEU	487	-6.837	42.932	8.187	1.00	50.28
ATOM	3393	CB	LEU	487	-6.709	41.543	7.553	1.00	51.28
ATOM	3394	CG	LEU	487	-7.813	40.529	7.871	1.00	52.57
ATOM	3395	CD1	LEU	487	-7.551	39.250	7.099	1.00	53.26
ATOM	3396	CD2	LEU	487	-7.875	40.253	9.361	1.00	53.45
ATOM	3397	C	LEU	487	-6.158	42.948	9.556	1.00	49.71
ATOM	3398	O	LEU	487	-6.811	42.801	10.591	1.00	48.49
ATOM	3399	N	ALA	488	-4.841	43.128	9.549	1.00	49.21
ATOM	3400	CA	ALA	488	-4.071	43.177	10.784	1.00	48.39
ATOM	3401	CB	ALA	488	-2.583	43.275	10.468	1.00	48.13
ATOM	3402	C	ALA	488	-4.513	44.380	11.607	1.00	48.23
ATOM	3403	O	ALA	488	-4.465	44.353	12.835	1.00	48.24
ATOM	3404	N	LYS	489	-4.946	45.433	10.923	1.00	48.36
ATOM	3405	CA	LYS	489	-5.399	46.646	11.593	1.00	48.70
ATOM	3406	CB	LYS	489	-5.738	47.721	10.564	1.00	49.47
ATOM	3407	CG	LYS	489	-4.615	48.018	9.591	1.00	51.46
ATOM	3408	CD	LYS	489	-5.070	48.969	8.495	1.00	53.59
ATOM	3409	CE	LYS	489	-3.995	49.127	7.431	1.00	54.03
ATOM	3410	NZ	LYS	489	-4.460	49.959	6.292	1.00	54.51
ATOM	3411	C	LYS	489	-6.626	46.357	12.450	1.00	48.17
ATOM	3412	O	LYS	489	-6.667	46.723	13.623	1.00	47.72
ATOM	3413	N	ARG	490	-7.627	45.704	11.863	1.00	48.64
ATOM	3414	CA	ARG	490	-8.842	45.377	12.605	1.00	48.86
ATOM	3415	CB	ARG	490	-9.846	44.622	11.725	1.00	49.59
ATOM	3416	CG	ARG	490	-10.743	45.511	10.884	1.00	50.73

ATOM	3417	CD	ARG	490	-12.089	44.836	10.629	1.00	51.13
ATOM	3418	NE	ARG	490	-11.966	43.619	9.832	1.00	51.85
ATOM	3419	CZ	ARG	490	-12.959	42.759	9.616	1.00	51.49
ATOM	3420	NH1	ARG	490	-14.157	42.977	10.141	1.00	51.44
ATOM	3421	NH2	ARG	490	-12.755	41.680	8.871	1.00	50.98
ATOM	3422	C	ARG	490	-8.525	44.532	13.831	1.00	48.05
ATOM	3423	O	ARG	490	-8.860	44.904	14.956	1.00	48.14
ATOM	3424	N	ILE	491	-7.874	43.394	13.603	1.00	47.40
ATOM	3425	CA	ILE	491	-7.509	42.477	14.679	1.00	46.20
ATOM	3426	CB	ILE	491	-6.621	41.323	14.150	1.00	45.42
ATOM	3427	CG2	ILE	491	-6.168	40.440	15.304	1.00	45.08
ATOM	3428	CG1	ILE	491	-7.403	40.494	13.126	1.00	45.31
ATOM	3429	CD1	ILE	491	-6.608	39.364	12.503	1.00	45.50
ATOM	3430	C	ILE	491	-6.777	43.188	15.811	1.00	45.67
ATOM	3431	O	ILE	491	-7.119	43.022	16.982	1.00	45.67
ATOM	3432	N	THR	492	-5.773	43.984	15.460	1.00	45.88
ATOM	3433	CA	THR	492	-4.998	44.715	16.456	1.00	45.57
ATOM	3434	CB	THR	492	-3.790	45.421	15.814	1.00	44.78
ATOM	3435	OG1	THR	492	-3.046	44.481	15.030	1.00	44.42
ATOM	3436	CG2	THR	492	-2.882	46.000	16.891	1.00	43.82
ATOM	3437	C	THR	492	-5.849	45.768	17.155	1.00	46.83
ATOM	3438	O	THR	492	-5.732	45.968	18.366	1.00	47.12
ATOM	3439	N	GLU	493	-6.699	46.444	16.387	1.00	47.21
ATOM	3440	CA	GLU	493	-7.568	47.483	16.934	1.00	48.40
ATOM	3441	CB	GLU	493	-7.898	48.523	15.860	1.00	49.93
ATOM	3442	CG	GLU	493	-6.713	49.354	15.407	1.00	52.65
ATOM	3443	CD	GLU	493	-7.088	50.372	14.347	1.00	54.51
ATOM	3444	OE1	GLU	493	-7.493	49.957	13.238	1.00	55.78
ATOM	3445	OE2	GLU	493	-6.980	51.585	14.623	1.00	55.00
ATOM	3446	C	GLU	493	-8.866	46.909	17.486	1.00	47.51
ATOM	3447	O	GLU	493	-9.806	47.651	17.776	1.00	48.38
ATOM	3448	N	ALA	494	-8.914	45.587	17.630	1.00	45.76
ATOM	3449	CA	ALA	494	-10.103	44.916	18.143	1.00	43.41
ATOM	3450	CB	ALA	494	-10.674	43.983	17.081	1.00	43.68
ATOM	3451	C	ALA	494	-9.790	44.129	19.407	1.00	41.36
ATOM	3452	O	ALA	494	-10.674	43.879	20.226	1.00	40.45
ATOM	3453	N	LEU	495	-8.528	43.741	19.559	1.00	39.65
ATOM	3454	CA	LEU	495	-8.103	42.974	20.723	1.00	37.83
ATOM	3455	CB	LEU	495	-7.126	41.866	20.310	1.00	37.72
ATOM	3456	CG	LEU	495	-7.606	40.812	19.305	1.00	38.81
ATOM	3457	CD1	LEU	495	-6.498	39.797	19.069	1.00	37.67
ATOM	3458	CD2	LEU	495	-8.851	40.121	19.825	1.00	39.75
ATOM	3459	C	LEU	495	-7.446	43.851	21.780	1.00	37.16
ATOM	3460	O	LEU	495	-6.866	44.895	21.473	1.00	35.11
ATOM	3461	N	ALA	496	-7.542	43.414	23.031	1.00	36.75
ATOM	3462	CA	ALA	496	-6.954	44.141	24.143	1.00	37.22
ATOM	3463	CB	ALA	496	-7.780	43.927	25.399	1.00	36.82
ATOM	3464	C	ALA	496	-5.527	43.656	24.360	1.00	37.76
ATOM	3465	O	ALA	496	-4.656	44.427	24.754	1.00	38.66
ATOM	3466	N	ILE	497	-5.291	42.374	24.097	1.00	38.35
ATOM	3467	CA	ILE	497	-3.961	41.793	24.263	1.00	38.83
ATOM	3468	CB	ILE	497	-4.015	40.246	24.284	1.00	37.92
ATOM	3469	CG2	ILE	497	-4.894	39.770	25.438	1.00	37.32
ATOM	3470	CG1	ILE	497	-4.558	39.728	22.950	1.00	38.42
ATOM	3471	CD1	ILE	497	-4.531	38.220	22.814	1.00	38.06
ATOM	3472	C	ILE	497	-3.052	42.220	23.117	1.00	39.35
ATOM	3473	O	ILE	497	-3.517	42.443	21.998	1.00	40.82
ATOM	3474	N	PRO	498	-1.739	42.333	23.377	1.00	39.89
ATOM	3475	CD	PRO	498	-1.048	42.058	24.648	1.00	38.22
ATOM	3476	CA	PRO	498	-0.786	42.737	22.336	1.00	39.86
ATOM	3477	CB	PRO	498	0.541	42.807	23.093	1.00	40.07
ATOM	3478	CG	PRO	498	0.359	41.804	24.190	1.00	39.95
ATOM	3479	C	PRO	498	-0.745	41.764	21.158	1.00	40.23
ATOM	3480	O	PRO	498	-0.824	40.551	21.341	1.00	40.13
ATOM	3481	N	VAL	499	-0.631	42.302	19.947	1.00	40.04
ATOM	3482	CA	VAL	499	-0.588	41.475	18.746	1.00	39.96
ATOM	3483	CB	VAL	499	-1.711	41.877	17.754	1.00	39.82
ATOM	3484	CG1	VAL	499	-1.678	40.978	16.527	1.00	39.71
ATOM	3485	CG2	VAL	499	-3.068	41.785	18.440	1.00	39.57
ATOM	3486	C	VAL	499	0.762	41.592	18.040	1.00	40.53
ATOM	3487	O	VAL	499	1.081	42.633	17.468	1.00	40.65
ATOM	3488	N	ILE	500	1.555	40.524	18.089	1.00	41.28
ATOM	3489	CA	ILE	500	2.865	40.509	17.444	1.00	41.57
ATOM	3490	CB	ILE	500	3.828	39.525	18.142	1.00	42.09
ATOM	3491	CG2	ILE	500	5.176	39.522	17.429	1.00	42.77
ATOM	3492	CG1	ILE	500	4.006	39.927	19.608	1.00	43.30
ATOM	3493	CD1	ILE	500	4.799	38.930	20.434	1.00	43.71

ATOM	3494	C	ILE	500	2.695	40.090	15.990	1.00	41.61
ATOM	3495	O	ILE	500	2.071	39.068	15.693	1.00	40.85
ATOM	3496	N	GLY	501	3.254	40.881	15.081	1.00	40.82
ATOM	3497	CA	GLY	501	3.118	40.572	13.672	1.00	40.29
ATOM	3498	C	GLY	501	4.371	40.098	12.968	1.00	39.63
ATOM	3499	O	GLY	501	5.494	40.348	13.405	1.00	39.28
ATOM	3500	N	ILE	502	4.154	39.401	11.860	1.00	39.72
ATOM	3501	CA	ILE	502	5.226	38.875	11.032	1.00	41.34
ATOM	3502	CB	ILE	502	5.709	37.488	11.553	1.00	41.52
ATOM	3503	CG2	ILE	502	4.522	36.582	11.830	1.00	42.33
ATOM	3504	CG1	ILE	502	6.659	36.845	10.544	1.00	42.33
ATOM	3505	CD1	ILE	502	7.958	37.584	10.375	1.00	43.95
ATOM	3506	C	ILE	502	4.676	38.766	9.609	1.00	42.06
ATOM	3507	O	ILE	502	4.029	37.782	9.245	1.00	42.10
ATOM	3508	N	GLY	503	4.922	39.801	8.812	1.00	43.11
ATOM	3509	CA	GLY	503	4.426	39.817	7.449	1.00	44.13
ATOM	3510	C	GLY	503	2.981	40.273	7.444	1.00	44.13
ATOM	3511	O	GLY	503	2.215	39.950	6.535	1.00	44.93
ATOM	3512	N	ALA	504	2.612	41.028	8.474	1.00	44.37
ATOM	3513	CA	ALA	504	1.255	41.540	8.610	1.00	45.44
ATOM	3514	CB	ALA	504	0.612	40.976	9.871	1.00	45.34
ATOM	3515	C	ALA	504	1.249	43.065	8.663	1.00	45.59
ATOM	3516	O	ALA	504	0.245	43.677	9.026	1.00	45.09
ATOM	3517	N	GLY	505	2.373	43.672	8.296	1.00	46.27
ATOM	3518	CA	GLY	505	2.465	45.119	8.316	1.00	47.16
ATOM	3519	C	GLY	505	2.955	45.644	9.652	1.00	47.80
ATOM	3520	O	GLY	505	3.187	44.870	10.581	1.00	46.72
ATOM	3521	N	ASN	506	3.106	46.963	9.749	1.00	47.19
ATOM	3522	CA	ASN	506	3.582	47.600	10.974	1.00	47.23
ATOM	3523	CB	ASN	506	4.561	48.725	10.624	1.00	47.68
ATOM	3524	CG	ASN	506	3.972	49.737	9.656	1.00	47.63
ATOM	3525	OD1	ASN	506	4.678	50.613	9.156	1.00	49.34
ATOM	3526	ND2	ASN	506	2.676	49.623	9.388	1.00	47.05
ATOM	3527	C	ASN	506	2.445	48.146	11.836	1.00	47.02
ATOM	3528	O	ASN	506	2.671	48.962	12.734	1.00	45.93
ATOM	3529	N	VAL	507	1.229	47.681	11.561	1.00	46.55
ATOM	3530	CA	VAL	507	0.046	48.106	12.300	1.00	46.94
ATOM	3531	CB	VAL	507	-1.238	47.855	11.482	1.00	47.55
ATOM	3532	CG1	VAL	507	-2.447	48.398	12.228	1.00	48.40
ATOM	3533	CG2	VAL	507	-1.117	48.506	10.117	1.00	48.35
ATOM	3534	C	VAL	507	-0.070	47.357	13.622	1.00	46.72
ATOM	3535	O	VAL	507	-0.693	47.842	14.567	1.00	47.09
ATOM	3536	N	THR	508	0.531	46.171	13.683	1.00	46.59
ATOM	3537	CA	THR	508	0.494	45.355	14.896	1.00	46.09
ATOM	3538	CB	THR	508	1.109	43.955	14.653	1.00	46.09
ATOM	3539	OG1	THR	508	2.438	44.091	14.138	1.00	46.20
ATOM	3540	CG2	THR	508	0.264	43.166	13.658	1.00	45.82
ATOM	3541	C	THR	508	1.239	46.036	16.042	1.00	45.51
ATOM	3542	O	THR	508	2.017	46.964	15.823	1.00	45.43
ATOM	3543	N	ASP	509	0.993	45.572	17.263	1.00	44.71
ATOM	3544	CA	ASP	509	1.630	46.140	18.447	1.00	44.33
ATOM	3545	CB	ASP	509	0.940	45.627	19.713	1.00	43.80
ATOM	3546	CG	ASP	509	-0.541	45.942	19.738	1.00	43.81
ATOM	3547	OD1	ASP	509	-0.899	47.139	19.730	1.00	41.97
ATOM	3548	OD2	ASP	509	-1.349	44.990	19.764	1.00	44.48
ATOM	3549	C	ASP	509	3.113	45.801	18.510	1.00	44.55
ATOM	3550	O	ASP	509	3.914	46.576	19.030	1.00	44.42
ATOM	3551	N	GLY	510	3.473	44.636	17.983	1.00	44.35
ATOM	3552	CA	GLY	510	4.864	44.225	18.001	1.00	44.15
ATOM	3553	C	GLY	510	5.269	43.479	16.749	1.00	44.41
ATOM	3554	O	GLY	510	4.445	43.221	15.870	1.00	45.25
ATOM	3555	N	GLN	511	6.547	43.129	16.667	1.00	43.48
ATOM	3556	CA	GLN	511	7.063	42.406	15.513	1.00	42.71
ATOM	3557	CB	GLN	511	7.893	43.342	14.625	1.00	42.63
ATOM	3558	CG	GLN	511	7.109	44.465	13.958	1.00	39.39
ATOM	3559	CD	GLN	511	6.088	43.957	12.959	1.00	38.03
ATOM	3560	OE1	GLN	511	6.386	43.093	12.136	1.00	36.45
ATOM	3561	NE2	GLN	511	4.878	44.502	13.017	1.00	37.24
ATOM	3562	C	GLN	511	7.930	41.238	15.959	1.00	43.26
ATOM	3563	O	GLN	511	8.402	41.197	17.094	1.00	42.66
ATOM	3564	N	ILE	512	8.130	40.287	15.055	1.00	43.65
ATOM	3565	CA	ILE	512	8.957	39.125	15.343	1.00	44.30
ATOM	3566	CB	ILE	512	8.159	38.052	16.124	1.00	43.90
ATOM	3567	CG2	ILE	512	7.079	37.448	15.234	1.00	44.70
ATOM	3568	CG1	ILE	512	9.108	36.962	16.627	1.00	43.78
ATOM	3569	CD1	ILE	512	8.463	35.995	17.595	1.00	43.66
ATOM	3570	C	ILE	512	9.472	38.536	14.028	1.00	44.66

ATOM	3571	O	ILE	512	8.843	38.689	12.979	1.00	44.73
ATOM	3572	N	LEU	513	10.625	37.879	14.087	1.00	45.11
ATOM	3573	CA	LEU	513	11.215	37.274	12.903	1.00	45.41
ATOM	3574	CB	LEU	513	11.690	38.360	11.936	1.00	47.61
ATOM	3575	CG	LEU	513	11.333	38.180	10.457	1.00	49.48
ATOM	3576	CD1	LEU	513	12.121	39.187	9.645	1.00	50.43
ATOM	3577	CD2	LEU	513	11.651	36.759	9.988	1.00	50.20
ATOM	3578	C	LEU	513	12.400	36.396	13.288	1.00	44.78
ATOM	3579	O	LEU	513	13.020	36.594	14.337	1.00	44.20
ATOM	3580	N	VAL	514	12.714	35.428	12.432	1.00	43.32
ATOM	3581	CA	VAL	514	13.834	34.532	12.683	1.00	43.17
ATOM	3582	CB	VAL	514	13.914	33.413	11.623	1.00	43.69
ATOM	3583	CG1	VAL	514	15.057	32.460	11.960	1.00	43.51
ATOM	3584	CG2	VAL	514	12.594	32.669	11.554	1.00	43.46
ATOM	3585	C	VAL	514	15.124	35.342	12.638	1.00	42.43
ATOM	3586	O	VAL	514	15.377	36.069	11.679	1.00	42.48
ATOM	3587	N	MET	515	15.931	35.214	13.684	1.00	41.21
ATOM	3588	CA	MET	515	17.190	35.935	13.772	1.00	40.22
ATOM	3589	CB	MET	515	17.929	35.543	15.050	1.00	38.49
ATOM	3590	CG	MET	515	18.189	34.057	15.180	1.00	37.77
ATOM	3591	SD	MET	515	19.693	33.741	16.107	1.00	37.43
ATOM	3592	CE	MET	515	20.902	33.853	14.776	1.00	39.24
ATOM	3593	C	MET	515	18.086	35.669	12.569	1.00	40.31
ATOM	3594	O	MET	515	18.749	36.575	12.063	1.00	39.94
ATOM	3595	N	HIS	516	18.100	34.420	12.116	1.00	40.39
ATOM	3596	CA	HIS	516	18.916	34.011	10.978	1.00	41.60
ATOM	3597	CB	HIS	516	18.683	32.523	10.694	1.00	40.66
ATOM	3598	CG	HIS	516	19.230	31.619	11.755	1.00	39.06
ATOM	3599	CD2	HIS	516	18.682	31.162	12.906	1.00	37.78
ATOM	3600	ND1	HIS	516	20.517	31.128	11.725	1.00	38.08
ATOM	3601	CE1	HIS	516	20.740	30.409	12.810	1.00	35.88
ATOM	3602	NE2	HIS	516	19.642	30.415	13.544	1.00	37.95
ATOM	3603	C	HIS	516	18.657	34.836	9.718	1.00	42.74
ATOM	3604	O	HIS	516	19.558	35.025	8.898	1.00	42.29
ATOM	3605	N	ASP	517	17.429	35.323	9.567	1.00	43.70
ATOM	3606	CA	ASP	517	17.064	36.134	8.410	1.00	45.81
ATOM	3607	CB	ASP	517	15.640	35.807	7.953	1.00	45.49
ATOM	3608	CG	ASP	517	15.572	34.538	7.124	1.00	47.31
ATOM	3609	OD1	ASP	517	16.287	34.456	6.104	1.00	47.95
ATOM	3610	OD2	ASP	517	14.803	33.627	7.481	1.00	48.46
ATOM	3611	C	ASP	517	17.175	37.625	8.708	1.00	46.65
ATOM	3612	O	ASP	517	17.175	38.452	7.794	1.00	47.65
ATOM	3613	N	ALA	518	17.272	37.965	9.988	1.00	47.52
ATOM	3614	CA	ALA	518	17.379	39.358	10.404	1.00	48.26
ATOM	3615	CB	ALA	518	16.748	39.540	11.780	1.00	47.98
ATOM	3616	C	ALA	518	18.833	39.817	10.432	1.00	48.77
ATOM	3617	O	ALA	518	19.113	41.014	10.470	1.00	48.43
ATOM	3618	N	PHE	519	19.758	38.863	10.412	1.00	49.79
ATOM	3619	CA	PHE	519	21.178	39.193	10.437	1.00	50.88
ATOM	3620	CB	PHE	519	21.810	38.675	11.723	1.00	51.40
ATOM	3621	CG	PHE	519	21.076	39.092	12.957	1.00	52.43
ATOM	3622	CD1	PHE	519	20.855	40.436	13.228	1.00	53.32
ATOM	3623	CD2	PHE	519	20.594	38.141	13.845	1.00	53.65
ATOM	3624	CE1	PHE	519	20.160	40.829	14.369	1.00	53.53
ATOM	3625	CE2	PHE	519	19.899	38.522	14.988	1.00	54.19
ATOM	3626	CZ	PHE	519	19.682	39.869	15.251	1.00	53.89
ATOM	3627	C	PHE	519	21.915	38.622	9.234	1.00	51.31
ATOM	3628	O	PHE	519	23.130	38.413	9.277	1.00	51.70
ATOM	3629	N	GLY	520	21.168	38.369	8.165	1.00	51.46
ATOM	3630	CA	GLY	520	21.752	37.832	6.950	1.00	52.29
ATOM	3631	C	GLY	520	22.668	36.646	7.172	1.00	52.89
ATOM	3632	O	GLY	520	23.880	36.740	6.973	1.00	52.01
ATOM	3633	N	ILE	521	22.085	35.526	7.582	1.00	53.71
ATOM	3634	CA	ILE	521	22.844	34.309	7.830	1.00	54.45
ATOM	3635	CB	ILE	521	22.669	33.839	9.287	1.00	53.41
ATOM	3636	CG2	ILE	521	23.483	32.580	9.531	1.00	52.98
ATOM	3637	CG1	ILE	521	23.109	34.948	10.243	1.00	52.97
ATOM	3638	CD1	ILE	521	22.872	34.629	11.702	1.00	51.81
ATOM	3639	C	ILE	521	22.375	33.201	6.894	1.00	55.91
ATOM	3640	O	ILE	521	23.163	32.358	6.467	1.00	56.51
ATOM	3641	N	THR	522	21.089	33.216	6.566	1.00	57.60
ATOM	3642	CA	THR	522	20.517	32.203	5.692	1.00	60.04
ATOM	3643	CB	THR	522	19.147	31.738	6.218	1.00	60.24
ATOM	3644	OG1	THR	522	18.278	32.869	6.353	1.00	59.37
ATOM	3645	CG2	THR	522	19.301	31.058	7.569	1.00	60.73
ATOM	3646	C	THR	522	20.355	32.683	4.252	1.00	61.62
ATOM	3647	O	THR	522	19.702	33.695	3.992	1.00	61.80

ATOM	3648	N	GLY	523	20.959	31.942	3.324	1.00	63.15
ATOM	3649	CA	GLY	523	20.881	32.276	1.911	1.00	65.08
ATOM	3650	C	GLY	523	20.874	33.762	1.601	1.00	66.40
ATOM	3651	O	GLY	523	21.492	34.563	2.305	1.00	66.60
ATOM	3652	N	GLY	524	20.170	34.128	0.536	1.00	66.95
ATOM	3653	CA	GLY	524	20.092	35.522	0.146	1.00	67.88
ATOM	3654	C	GLY	524	18.666	35.958	-0.116	1.00	68.78
ATOM	3655	O	GLY	524	18.280	37.078	0.220	1.00	69.41
ATOM	3656	N	HIS	525	17.880	35.072	-0.719	1.00	69.01
ATOM	3657	CA	HIS	525	16.487	35.376	-1.023	1.00	69.66
ATOM	3658	CB	HIS	525	15.987	34.488	-2.165	1.00	70.70
ATOM	3659	CG	HIS	525	16.435	34.939	-3.520	1.00	71.89
ATOM	3660	CD2	HIS	525	17.174	34.317	-4.469	1.00	72.56
ATOM	3661	ND1	HIS	525	16.105	36.172	-4.039	1.00	72.33
ATOM	3662	CE1	HIS	525	16.620	36.290	-5.250	1.00	72.53
ATOM	3663	NE2	HIS	525	17.273	35.178	-5.535	1.00	72.71
ATOM	3664	C	HIS	525	15.578	35.208	0.191	1.00	69.38
ATOM	3665	O	HIS	525	14.651	34.398	0.177	1.00	69.45
ATOM	3666	N	ILE	526	15.849	35.979	1.240	1.00	68.69
ATOM	3667	CA	ILE	526	15.047	35.922	2.457	1.00	67.80
ATOM	3668	CB	ILE	526	15.558	36.927	3.512	1.00	67.79
ATOM	3669	CG2	ILE	526	17.003	36.613	3.872	1.00	68.10
ATOM	3670	CG1	ILE	526	15.431	38.354	2.974	1.00	67.42
ATOM	3671	CD1	ILE	526	15.759	39.424	3.991	1.00	67.22
ATOM	3672	C	ILE	526	13.601	36.271	2.116	1.00	67.09
ATOM	3673	O	ILE	526	13.325	36.817	1.050	1.00	67.20
ATOM	3674	N	PRO	527	12.657	35.959	3.018	1.00	66.11
ATOM	3675	CD	PRO	527	12.814	35.365	4.356	1.00	66.02
ATOM	3676	CA	PRO	527	11.251	36.270	2.747	1.00	65.35
ATOM	3677	CB	PRO	527	10.532	35.712	3.974	1.00	65.35
ATOM	3678	CG	PRO	527	11.563	35.834	5.053	1.00	65.87
ATOM	3679	C	PRO	527	11.023	37.768	2.555	1.00	64.42
ATOM	3680	O	PRO	527	11.728	38.591	3.141	1.00	64.06
ATOM	3681	N	LYS	528	10.038	38.110	1.729	1.00	63.60
ATOM	3682	CA	LYS	528	9.719	39.506	1.440	1.00	62.63
ATOM	3683	CB	LYS	528	8.504	39.596	0.507	1.00	63.43
ATOM	3684	CG	LYS	528	8.568	38.689	-0.715	1.00	64.83
ATOM	3685	CD	LYS	528	8.054	37.291	-0.389	1.00	65.58
ATOM	3686	CE	LYS	528	8.237	36.336	-1.559	1.00	65.50
ATOM	3687	NZ	LYS	528	9.678	36.076	-1.831	1.00	65.11
ATOM	3688	C	LYS	528	9.443	40.317	2.702	1.00	61.12
ATOM	3689	O	LYS	528	9.874	41.465	2.815	1.00	60.81
ATOM	3690	N	PHE	529	8.726	39.715	3.648	1.00	59.49
ATOM	3691	CA	PHE	529	8.379	40.383	4.899	1.00	57.86
ATOM	3692	CB	PHE	529	7.258	39.611	5.608	1.00	57.20
ATOM	3693	CG	PHE	529	7.586	38.168	5.885	1.00	56.39
ATOM	3694	CD1	PHE	529	8.487	37.820	6.887	1.00	55.45
ATOM	3695	CD2	PHE	529	6.990	37.153	5.140	1.00	56.22
ATOM	3696	CE1	PHE	529	8.787	36.483	7.146	1.00	55.50
ATOM	3697	CE2	PHE	529	7.283	35.813	5.390	1.00	55.77
ATOM	3698	CZ	PHE	529	8.183	35.478	6.396	1.00	55.99
ATOM	3699	C	PHE	529	9.564	40.562	5.844	1.00	56.78
ATOM	3700	O	PHE	529	9.463	41.272	6.843	1.00	56.44
ATOM	3701	N	ALA	530	10.684	39.923	5.525	1.00	55.87
ATOM	3702	CA	ALA	530	11.878	40.015	6.357	1.00	55.61
ATOM	3703	CB	ALA	530	12.612	38.681	6.366	1.00	55.37
ATOM	3704	C	ALA	530	12.809	41.114	5.864	1.00	55.36
ATOM	3705	O	ALA	530	12.597	41.687	4.795	1.00	55.63
ATOM	3706	N	LYS	531	13.842	41.399	6.651	1.00	55.00
ATOM	3707	CA	LYS	531	14.816	42.425	6.301	1.00	54.83
ATOM	3708	CB	LYS	531	14.303	43.806	6.712	1.00	54.88
ATOM	3709	CG	LYS	531	15.283	44.932	6.428	1.00	55.59
ATOM	3710	CD	LYS	531	14.726	46.280	6.851	1.00	55.93
ATOM	3711	CE	LYS	531	15.716	47.397	6.560	1.00	56.02
ATOM	3712	NZ	LYS	531	15.170	48.729	6.933	1.00	55.93
ATOM	3713	C	LYS	531	16.161	42.166	6.970	1.00	54.84
ATOM	3714	O	LYS	531	16.220	41.840	8.154	1.00	54.41
ATOM	3715	N	ASN	532	17.237	42.315	6.203	1.00	54.78
ATOM	3716	CA	ASN	532	18.591	42.110	6.708	1.00	54.97
ATOM	3717	CB	ASN	532	19.544	41.805	5.548	1.00	54.87
ATOM	3718	CG	ASN	532	20.931	41.399	6.017	1.00	53.96
ATOM	3719	OD1	ASN	532	21.469	41.963	6.970	1.00	54.05
ATOM	3720	ND2	ASN	532	21.522	40.425	5.335	1.00	54.07
ATOM	3721	C	ASN	532	19.061	43.373	7.424	1.00	55.48
ATOM	3722	O	ASN	532	19.215	44.422	6.798	1.00	56.16
ATOM	3723	N	PHE	533	19.290	43.275	8.730	1.00	55.65
ATOM	3724	CA	PHE	533	19.744	44.425	9.503	1.00	56.07

ATOM	3725	CB	PHE	533	19.055	44.463	10.871	1.00	56.06
ATOM	3726	CG	PHE	533	17.607	44.863	10.812	1.00	56.39
ATOM	3727	CD1	PHE	533	16.649	43.993	10.303	1.00	56.26
ATOM	3728	CD2	PHE	533	17.204	46.124	11.245	1.00	56.64
ATOM	3729	CE1	PHE	533	15.311	44.371	10.228	1.00	56.57
ATOM	3730	CE2	PHE	533	15.868	46.511	11.173	1.00	56.36
ATOM	3731	CZ	PHE	533	14.921	45.634	10.663	1.00	56.79
ATOM	3732	C	PHE	533	21.255	44.446	9.695	1.00	56.80
ATOM	3733	O	PHE	533	21.808	45.424	10.199	1.00	56.46
ATOM	3734	N	LEU	534	21.920	43.367	9.297	1.00	57.79
ATOM	3735	CA	LEU	534	23.370	43.281	9.427	1.00	58.91
ATOM	3736	CB	LEU	534	23.811	41.820	9.535	1.00	58.06
ATOM	3737	CG	LEU	534	25.310	41.588	9.748	1.00	57.55
ATOM	3738	CD1	LEU	534	25.744	42.191	11.076	1.00	56.50
ATOM	3739	CD2	LEU	534	25.605	40.098	9.718	1.00	57.05
ATOM	3740	C	LEU	534	24.041	43.928	8.220	1.00	60.52
ATOM	3741	O	LEU	534	25.201	44.337	8.284	1.00	60.29
ATOM	3742	N	ALA	535	23.303	44.010	7.118	1.00	62.13
ATOM	3743	CA	ALA	535	23.816	44.611	5.892	1.00	64.07
ATOM	3744	CB	ALA	535	22.930	44.228	4.713	1.00	64.06
ATOM	3745	C	ALA	535	23.859	46.127	6.048	1.00	65.26
ATOM	3746	O	ALA	535	24.618	46.817	5.363	1.00	65.11
ATOM	3747	N	GLU	536	23.034	46.633	6.959	1.00	66.37
ATOM	3748	CA	GLU	536	22.955	48.064	7.233	1.00	67.19
ATOM	3749	CB	GLU	536	21.583	48.408	7.823	1.00	68.14
ATOM	3750	CG	GLU	536	20.397	47.779	7.094	1.00	69.56
ATOM	3751	CD	GLU	536	20.159	48.366	5.713	1.00	70.40
ATOM	3752	OE1	GLU	536	21.070	48.290	4.861	1.00	71.10
ATOM	3753	OE2	GLU	536	19.053	48.904	5.481	1.00	70.27
ATOM	3754	C	GLU	536	24.050	48.445	8.228	1.00	66.96
ATOM	3755	O	GLU	536	24.057	49.552	8.765	1.00	67.14
ATOM	3756	N	THR	537	24.969	47.515	8.472	1.00	66.36
ATOM	3757	CA	THR	537	26.069	47.741	9.402	1.00	65.80
ATOM	3758	CB	THR	537	25.557	47.783	10.860	1.00	65.76
ATOM	3759	OG1	THR	537	26.640	48.104	11.742	1.00	65.38
ATOM	3760	CG2	THR	537	24.962	46.436	11.256	1.00	65.93
ATOM	3761	C	THR	537	27.121	46.637	9.269	1.00	65.16
ATOM	3762	O	THR	537	27.200	45.962	8.242	1.00	65.26
ATOM	3763	N	GLY	538	27.931	46.463	10.308	1.00	64.34
ATOM	3764	CA	GLY	538	28.959	45.439	10.282	1.00	63.04
ATOM	3765	C	GLY	538	29.062	44.734	11.617	1.00	62.37
ATOM	3766	O	GLY	538	30.023	44.011	11.883	1.00	62.04
ATOM	3767	N	ASP	539	28.060	44.949	12.462	1.00	61.49
ATOM	3768	CA	ASP	539	28.021	44.342	13.785	1.00	60.74
ATOM	3769	CB	ASP	539	28.268	45.407	14.857	1.00	62.06
ATOM	3770	CG	ASP	539	28.250	44.838	16.262	1.00	63.43
ATOM	3771	OD1	ASP	539	28.222	45.633	17.226	1.00	63.49
ATOM	3772	OD2	ASP	539	28.270	43.595	16.402	1.00	64.82
ATOM	3773	C	ASP	539	26.666	43.684	14.023	1.00	59.48
ATOM	3774	O	ASP	539	25.624	44.258	13.705	1.00	58.85
ATOM	3775	N	ILE	540	26.685	42.478	14.582	1.00	58.12
ATOM	3776	CA	ILE	540	25.455	41.747	14.867	1.00	56.14
ATOM	3777	CB	ILE	540	25.760	40.355	15.456	1.00	57.05
ATOM	3778	CG2	ILE	540	24.458	39.622	15.772	1.00	56.67
ATOM	3779	CG1	ILE	540	26.596	39.549	14.461	1.00	56.82
ATOM	3780	CD1	ILE	540	27.153	38.264	15.030	1.00	57.97
ATOM	3781	C	ILE	540	24.612	42.534	15.864	1.00	54.58
ATOM	3782	O	ILE	540	23.410	42.714	15.669	1.00	53.94
ATOM	3783	N	ARG	541	25.252	43.002	16.932	1.00	52.23
ATOM	3784	CA	ARG	541	24.564	43.779	17.955	1.00	50.98
ATOM	3785	CB	ARG	541	25.524	44.108	19.100	1.00	49.65
ATOM	3786	CG	ARG	541	26.008	42.882	19.852	1.00	48.84
ATOM	3787	CD	ARG	541	27.008	43.238	20.938	1.00	47.15
ATOM	3788	NE	ARG	541	27.476	42.053	21.655	1.00	47.04
ATOM	3789	CZ	ARG	541	28.122	41.038	21.087	1.00	47.57
ATOM	3790	NH1	ARG	541	28.383	41.054	19.787	1.00	47.71
ATOM	3791	NH2	ARG	541	28.509	40.004	21.821	1.00	47.56
ATOM	3792	C	ARG	541	23.999	45.066	17.359	1.00	50.80
ATOM	3793	O	ARG	541	22.915	45.515	17.739	1.00	50.76
ATOM	3794	N	ALA	542	24.735	45.654	16.422	1.00	50.14
ATOM	3795	CA	ALA	542	24.297	46.882	15.770	1.00	49.97
ATOM	3796	CB	ALA	542	25.369	47.376	14.806	1.00	49.83
ATOM	3797	C	ALA	542	22.996	46.614	15.020	1.00	49.62
ATOM	3798	O	ALA	542	22.065	47.417	15.064	1.00	49.97
ATOM	3799	N	ALA	543	22.942	45.479	14.332	1.00	49.14
ATOM	3800	CA	ALA	543	21.753	45.095	13.583	1.00	48.56
ATOM	3801	CB	ALA	543	22.022	43.819	12.794	1.00	47.62

ATOM	3802	C	ALA	543	20.593	44.882	14.554	1.00	48.49
ATOM	3803	O	ALA	543	19.431	45.095	14.205	1.00	48.03
ATOM	3804	N	VAL	544	20.923	44.462	15.773	1.00	47.91
ATOM	3805	CA	VAL	544	19.921	44.220	16.807	1.00	48.15
ATOM	3806	CB	VAL	544	20.547	43.544	18.054	1.00	47.72
ATOM	3807	CG1	VAL	544	19.493	43.354	19.133	1.00	48.12
ATOM	3808	CG2	VAL	544	21.151	42.203	17.670	1.00	47.67
ATOM	3809	C	VAL	544	19.280	45.535	17.234	1.00	48.25
ATOM	3810	O	VAL	544	18.055	45.670	17.229	1.00	48.02
ATOM	3811	N	ARG	545	20.113	46.503	17.602	1.00	47.95
ATOM	3812	CA	ARG	545	19.613	47.804	18.025	1.00	48.51
ATOM	3813	CB	ARG	545	20.771	48.699	18.471	1.00	47.82
ATOM	3814	CG	ARG	545	21.478	48.204	19.722	1.00	49.07
ATOM	3815	CD	ARG	545	22.351	49.289	20.335	1.00	49.84
ATOM	3816	NE	ARG	545	23.473	49.659	19.477	1.00	51.11
ATOM	3817	CZ	ARG	545	24.521	48.877	19.235	1.00	51.17
ATOM	3818	NH1	ARG	545	24.596	47.674	19.787	1.00	52.25
ATOM	3819	NH2	ARG	545	25.497	49.300	18.444	1.00	51.42
ATOM	3820	C	ARG	545	18.826	48.481	16.908	1.00	48.39
ATOM	3821	O	ARG	545	17.806	49.119	17.161	1.00	47.66
ATOM	3822	N	GLN	546	19.296	48.338	15.674	1.00	49.12
ATOM	3823	CA	GLN	546	18.610	48.941	14.538	1.00	50.17
ATOM	3824	CB	GLN	546	19.428	48.766	13.257	1.00	51.51
ATOM	3825	CG	GLN	546	18.835	49.481	12.052	1.00	54.04
ATOM	3826	CD	GLN	546	19.635	49.256	10.786	1.00	55.80
ATOM	3827	OE1	GLN	546	20.829	49.555	10.731	1.00	57.97
ATOM	3828	NE2	GLN	546	18.980	48.730	9.757	1.00	56.73
ATOM	3829	C	GLN	546	17.245	48.282	14.369	1.00	50.05
ATOM	3830	O	GLN	546	16.268	48.936	14.001	1.00	49.98
ATOM	3831	N	TYR	547	17.189	46.982	14.640	1.00	49.32
ATOM	3832	CA	TYR	547	15.948	46.227	14.537	1.00	48.54
ATOM	3833	CB	TYR	547	16.203	44.750	14.840	1.00	49.78
ATOM	3834	CG	TYR	547	14.944	43.925	14.955	1.00	50.44
ATOM	3835	CD1	TYR	547	14.056	43.822	13.885	1.00	51.69
ATOM	3836	CE1	TYR	547	12.893	43.064	13.984	1.00	51.91
ATOM	3837	CD2	TYR	547	14.637	43.249	16.135	1.00	51.50
ATOM	3838	CE2	TYR	547	13.476	42.487	16.247	1.00	51.56
ATOM	3839	CZ	TYR	547	12.610	42.399	15.168	1.00	52.16
ATOM	3840	OH	TYR	547	11.463	41.646	15.271	1.00	51.53
ATOM	3841	C	TYR	547	14.926	46.781	15.523	1.00	47.25
ATOM	3842	O	TYR	547	13.793	47.092	15.155	1.00	46.01
ATOM	3843	N	MET	548	15.345	46.902	16.779	1.00	45.68
ATOM	3844	CA	MET	548	14.491	47.421	17.839	1.00	45.05
ATOM	3845	CB	MET	548	15.273	47.471	19.153	1.00	43.72
ATOM	3846	CG	MET	548	15.852	46.136	19.574	1.00	44.22
ATOM	3847	SD	MET	548	17.010	46.272	20.949	1.00	43.86
ATOM	3848	CE	MET	548	15.902	46.115	22.333	1.00	45.50
ATOM	3849	C	MET	548	14.016	48.823	17.479	1.00	45.08
ATOM	3850	O	MET	548	12.859	49.186	17.708	1.00	43.72
ATOM	3851	N	ALA	549	14.929	49.603	16.910	1.00	45.01
ATOM	3852	CA	ALA	549	14.643	50.973	16.515	1.00	45.18
ATOM	3853	CB	ALA	549	15.923	51.651	16.044	1.00	44.23
ATOM	3854	C	ALA	549	13.581	51.042	15.424	1.00	45.78
ATOM	3855	O	ALA	549	12.518	51.625	15.626	1.00	45.86
ATOM	3856	N	GLU	550	13.867	50.442	14.272	1.00	46.83
ATOM	3857	CA	GLU	550	12.925	50.460	13.156	1.00	48.63
ATOM	3858	CB	GLU	550	13.470	49.657	11.975	1.00	49.72
ATOM	3859	CG	GLU	550	14.515	50.394	11.160	1.00	51.94
ATOM	3860	CD	GLU	550	14.779	49.726	9.828	1.00	53.48
ATOM	3861	OE1	GLU	550	13.799	49.459	9.097	1.00	54.23
ATOM	3862	OE2	GLU	550	15.961	49.474	9.506	1.00	55.31
ATOM	3863	C	GLU	550	11.535	49.946	13.514	1.00	49.36
ATOM	3864	O	GLU	550	10.530	50.507	13.073	1.00	49.22
ATOM	3865	N	VAL	551	11.477	48.879	14.303	1.00	48.98
ATOM	3866	CA	VAL	551	10.199	48.310	14.707	1.00	49.91
ATOM	3867	CB	VAL	551	10.397	47.020	15.538	1.00	49.52
ATOM	3868	CG1	VAL	551	9.066	46.544	16.094	1.00	49.11
ATOM	3869	CG2	VAL	551	11.017	45.937	14.668	1.00	49.69
ATOM	3870	C	VAL	551	9.409	49.318	15.536	1.00	50.71
ATOM	3871	O	VAL	551	8.193	49.444	15.385	1.00	50.53
ATOM	3872	N	GLU	552	10.110	50.036	16.408	1.00	51.60
ATOM	3873	CA	GLU	552	9.481	51.032	17.264	1.00	52.58
ATOM	3874	CB	GLU	552	10.379	51.324	18.468	1.00	53.60
ATOM	3875	CG	GLU	552	9.753	52.241	19.503	1.00	55.39
ATOM	3876	CD	GLU	552	10.650	52.453	20.704	1.00	56.32
ATOM	3877	OE1	GLU	552	10.199	53.087	21.682	1.00	56.45
ATOM	3878	OE2	GLU	552	11.808	51.987	20.670	1.00	57.66

ATOM	3879	C	GLU	552	9.217	52.323	16.492	1.00	53.07
ATOM	3880	O	GLU	552	8.295	53.073	16.811	1.00	52.73
ATOM	3881	N	SER	553	10.035	52.570	15.474	1.00	52.74
ATOM	3882	CA	SER	553	9.903	53.762	14.651	1.00	53.94
ATOM	3883	CB	SER	553	11.230	54.065	13.956	1.00	54.05
ATOM	3884	OG	SER	553	12.264	54.253	14.908	1.00	56.04
ATOM	3885	C	SER	553	8.811	53.583	13.603	1.00	54.10
ATOM	3886	O	SER	553	8.314	54.556	13.034	1.00	53.78
ATOM	3887	N	GLY	554	8.439	52.333	13.356	1.00	53.73
ATOM	3888	CA	GLY	554	7.413	52.052	12.371	1.00	53.14
ATOM	3889	C	GLY	554	8.037	51.889	11.003	1.00	53.03
ATOM	3890	O	GLY	554	7.353	51.571	10.030	1.00	52.59
ATOM	3891	N	VAL	555	9.347	52.109	10.931	1.00	52.96
ATOM	3892	CA	VAL	555	10.079	51.986	9.677	1.00	52.87
ATOM	3893	CB	VAL	555	11.565	52.367	9.862	1.00	53.58
ATOM	3894	CG1	VAL	555	12.285	52.329	8.523	1.00	52.84
ATOM	3895	CG2	VAL	555	11.671	53.749	10.485	1.00	53.08
ATOM	3896	C	VAL	555	9.998	50.554	9.156	1.00	52.67
ATOM	3897	O	VAL	555	9.908	50.324	7.948	1.00	52.23
ATOM	3898	N	TYR	556	10.031	49.595	10.076	1.00	52.50
ATOM	3899	CA	TYR	556	9.960	48.183	9.719	1.00	51.70
ATOM	3900	CB	TYR	556	11.227	47.456	10.174	1.00	51.86
ATOM	3901	CG	TYR	556	11.214	45.977	9.868	1.00	51.09
ATOM	3902	CD1	TYR	556	11.254	45.519	8.552	1.00	50.94
ATOM	3903	CE1	TYR	556	11.189	44.160	8.260	1.00	51.28
ATOM	3904	CD2	TYR	556	11.113	45.034	10.892	1.00	51.14
ATOM	3905	CE2	TYR	556	11.047	43.670	10.613	1.00	50.47
ATOM	3906	CZ	TYR	556	11.083	43.241	9.295	1.00	50.81
ATOM	3907	OH	TYR	556	10.995	41.900	9.000	1.00	50.30
ATOM	3908	C	TYR	556	8.741	47.531	10.363	1.00	51.68
ATOM	3909	O	TYR	556	8.529	47.653	11.569	1.00	51.15
ATOM	3910	N	PRO	557	7.927	46.820	9.565	1.00	52.14
ATOM	3911	CD	PRO	557	6.797	46.019	10.067	1.00	52.66
ATOM	3912	CA	PRO	557	8.100	46.621	8.120	1.00	52.90
ATOM	3913	CB	PRO	557	7.223	45.405	7.840	1.00	52.64
ATOM	3914	CG	PRO	557	6.089	45.614	8.786	1.00	52.85
ATOM	3915	C	PRO	557	7.684	47.839	7.292	1.00	53.09
ATOM	3916	O	PRO	557	6.762	48.566	7.664	1.00	53.40
ATOM	3917	N	GLY	558	8.366	48.050	6.170	1.00	53.27
ATOM	3918	CA	GLY	558	8.055	49.181	5.316	1.00	53.66
ATOM	3919	C	GLY	558	6.840	48.937	4.444	1.00	54.13
ATOM	3920	O	GLY	558	5.703	49.072	4.900	1.00	54.10
ATOM	3921	N	GLU	559	7.081	48.580	3.186	1.00	53.86
ATOM	3922	CA	GLU	559	6.001	48.309	2.245	1.00	54.22
ATOM	3923	CB	GLU	559	5.822	49.482	1.276	1.00	55.40
ATOM	3924	CG	GLU	559	4.536	49.415	0.461	1.00	56.21
ATOM	3925	CD	GLU	559	3.295	49.590	1.321	1.00	56.50
ATOM	3926	OE1	GLU	559	2.175	49.406	0.800	1.00	57.07
ATOM	3927	OE2	GLU	559	3.440	49.916	2.518	1.00	57.08
ATOM	3928	C	GLU	559	6.295	47.039	1.452	1.00	54.13
ATOM	3929	O	GLU	559	5.378	46.336	1.026	1.00	53.98
ATOM	3930	N	GLU	560	7.576	46.751	1.253	1.00	53.68
ATOM	3931	CA	GLU	560	7.977	45.560	0.515	1.00	54.17
ATOM	3932	CB	GLU	560	9.400	45.719	-0.027	1.00	54.49
ATOM	3933	CG	GLU	560	9.861	47.161	-0.132	1.00	55.28
ATOM	3934	CD	GLU	560	10.388	47.700	1.186	1.00	55.88
ATOM	3935	OE1	GLU	560	11.523	47.335	1.563	1.00	55.57
ATOM	3936	OE2	GLU	560	9.668	48.478	1.850	1.00	55.73
ATOM	3937	C	GLU	560	7.912	44.352	1.441	1.00	53.99
ATOM	3938	O	GLU	560	8.119	43.215	1.014	1.00	54.19
ATOM	3939	N	HIS	561	7.621	44.616	2.712	1.00	53.66
ATOM	3940	CA	HIS	561	7.527	43.571	3.727	1.00	53.03
ATOM	3941	CB	HIS	561	8.320	43.975	4.972	1.00	53.33
ATOM	3942	CG	HIS	561	9.687	44.507	4.676	1.00	52.71
ATOM	3943	CD2	HIS	561	10.242	45.720	4.914	1.00	52.67
ATOM	3944	ND1	HIS	561	10.662	43.755	4.057	1.00	52.82
ATOM	3945	CE1	HIS	561	11.758	44.482	3.926	1.00	53.52
ATOM	3946	NE2	HIS	561	11.529	45.677	4.439	1.00	52.58
ATOM	3947	C	HIS	561	6.073	43.340	4.124	1.00	52.40
ATOM	3948	O	HIS	561	5.783	42.508	4.983	1.00	52.28
ATOM	3949	N	SER	562	5.164	44.081	3.495	1.00	51.41
ATOM	3950	CA	SER	562	3.741	43.973	3.794	1.00	50.51
ATOM	3951	CB	SER	562	3.172	45.359	4.106	1.00	50.14
ATOM	3952	OG	SER	562	3.952	46.021	5.086	1.00	49.54
ATOM	3953	C	SER	562	2.956	43.350	2.644	1.00	50.99
ATOM	3954	O	SER	562	3.381	43.398	1.488	1.00	50.00
ATOM	3955	N	PHE	563	1.808	42.764	2.966	1.00	50.96

ATOM	3956	CA	PHE	563	0.966	42.144	1.953	1.00	51.90
ATOM	3957	CB	PHE	563	0.792	40.649	2.230	1.00	51.88
ATOM	3958	CG	PHE	563	2.085	39.889	2.291	1.00	52.62
ATOM	3959	CD1	PHE	563	2.800	39.800	3.482	1.00	52.62
ATOM	3960	CD2	PHE	563	2.598	39.274	1.154	1.00	52.42
ATOM	3961	CE1	PHE	563	4.008	39.107	3.540	1.00	53.30
ATOM	3962	CE2	PHE	563	3.805	38.580	1.200	1.00	53.30
ATOM	3963	CZ	PHE	563	4.512	38.496	2.397	1.00	53.09
ATOM	3964	C	PHE	563	-0.396	42.820	1.925	1.00	52.18
ATOM	3965	O	PHE	563	-0.847	43.371	2.930	1.00	51.96
ATOM	3966	N	HIS	564	-1.051	42.775	0.771	1.00	53.34
ATOM	3967	CA	HIS	564	-2.362	43.394	0.617	1.00	54.06
ATOM	3968	CB	HIS	564	-2.228	44.709	-0.155	1.00	54.83
ATOM	3969	CG	HIS	564	-1.305	45.696	0.493	1.00	55.50
ATOM	3970	CD2	HIS	564	-0.118	46.206	0.086	1.00	55.30
ATOM	3971	ND1	HIS	564	-1.564	46.262	1.722	1.00	55.51
ATOM	3972	CE1	HIS	564	-0.577	47.079	2.046	1.00	55.52
ATOM	3973	NE2	HIS	564	0.314	47.062	1.070	1.00	55.47
ATOM	3974	C	HIS	564	-3.315	42.457	-0.111	1.00	54.29
ATOM	3975	O	HIS	564	-4.385	42.152	0.454	1.00	54.03
ATOM	3976	OXT	HIS	564	-2.978	42.040	-1.238	1.00	55.99
ATOM	3977	C1	KPL	565	8.381	32.905	12.296	1.00	41.48
ATOM	3978	C2	KPL	565	7.795	33.008	13.719	1.00	41.70
ATOM	3979	C3	KPL	565	8.747	33.842	14.588	1.00	41.04
ATOM	3980	C4	KPL	565	6.432	33.729	13.657	1.00	42.99
ATOM	3981	O1	KPL	565	5.502	32.994	12.852	1.00	47.23
ATOM	3982	C5	KPL	565	7.641	31.587	14.333	1.00	41.12
ATOM	3983	O2	KPL	565	6.548	31.189	14.686	1.00	40.23
ATOM	3984	C6	KPL	565	8.827	30.664	14.510	1.00	39.79
ATOM	3985	O3	KPL	565	9.940	31.012	14.179	1.00	41.42
ATOM	3986	O4	KPL	565	8.649	29.440	15.040	1.00	37.97
ATOM	3987	CB	MET	601	10.230	21.149	-10.646	1.00	69.60
ATOM	3988	CG	MET	601	9.281	20.343	-11.531	1.00	71.50
ATOM	3989	SD	MET	601	7.632	21.063	-11.738	1.00	73.80
ATOM	3990	CE	MET	601	6.646	19.961	-10.716	1.00	73.00
ATOM	3991	C	MET	601	8.842	22.547	-9.089	1.00	66.93
ATOM	3992	O	MET	601	8.861	23.439	-9.940	1.00	67.03
ATOM	3993	N	MET	601	9.123	20.086	-8.698	1.00	68.90
ATOM	3994	CA	MET	601	9.767	21.337	-9.196	1.00	68.18
ATOM	3995	N	LYS	602	8.036	22.570	-8.032	1.00	64.76
ATOM	3996	CA	LYS	602	7.110	23.667	-7.796	1.00	62.08
ATOM	3997	CB	LYS	602	5.693	23.272	-8.237	1.00	63.38
ATOM	3998	CG	LYS	602	5.557	23.006	-9.732	1.00	64.55
ATOM	3999	CD	LYS	602	5.683	24.288	-10.545	1.00	65.81
ATOM	4000	CE	LYS	602	4.492	25.207	-10.311	1.00	65.96
ATOM	4001	NZ	LYS	602	4.629	26.497	-11.038	1.00	66.71
ATOM	4002	C	LYS	602	7.105	24.081	-6.322	1.00	59.15
ATOM	4003	O	LYS	602	7.250	25.263	-6.006	1.00	59.60
ATOM	4004	N	PRO	603	6.959	23.112	-5.396	1.00	55.04
ATOM	4005	CD	PRO	603	7.155	23.394	-3.964	1.00	54.14
ATOM	4006	CA	PRO	603	6.772	21.673	-5.613	1.00	51.11
ATOM	4007	CB	PRO	603	7.269	21.076	-4.303	1.00	52.30
ATOM	4008	CG	PRO	603	6.782	22.075	-3.311	1.00	53.08
ATOM	4009	C	PRO	603	5.317	21.318	-5.889	1.00	46.82
ATOM	4010	O	PRO	603	4.426	22.143	-5.704	1.00	47.26
ATOM	4011	N	THR	604	5.079	20.088	-6.329	1.00	41.84
ATOM	4012	CA	THR	604	3.727	19.639	-6.627	1.00	36.41
ATOM	4013	CB	THR	604	3.742	18.241	-7.268	1.00	36.28
ATOM	4014	OG1	THR	604	4.564	18.265	-8.440	1.00	34.78
ATOM	4015	CG2	THR	604	2.331	17.811	-7.650	1.00	35.28
ATOM	4016	C	THR	604	2.902	19.582	-5.350	1.00	33.25
ATOM	4017	O	THR	604	3.270	18.893	-4.398	1.00	31.12
ATOM	4018	N	THR	605	1.792	20.314	-5.326	1.00	30.68
ATOM	4019	CA	THR	605	0.929	20.327	-4.153	1.00	29.21
ATOM	4020	CB	THR	605	0.921	21.708	-3.465	1.00	29.89
ATOM	4021	OG1	THR	605	0.134	22.625	-4.236	1.00	30.44
ATOM	4022	CG2	THR	605	2.341	22.245	-3.336	1.00	29.99
ATOM	4023	C	THR	605	-0.505	19.970	-4.524	1.00	27.07
ATOM	4024	O	THR	605	-0.823	19.779	-5.700	1.00	25.26
ATOM	4025	N	ILE	606	-1.358	19.885	-3.508	1.00	24.97
ATOM	4026	CA	ILE	606	-2.767	19.551	-3.684	1.00	24.26
ATOM	4027	CB	ILE	606	-3.495	19.497	-2.318	1.00	26.83
ATOM	4028	CG2	ILE	606	-4.942	19.052	-2.510	1.00	24.52
ATOM	4029	CG1	ILE	606	-2.767	18.531	-1.381	1.00	28.76
ATOM	4030	CD1	ILE	606	-3.204	18.634	0.077	1.00	32.70
ATOM	4031	C	ILE	606	-3.459	20.593	-4.558	1.00	22.72
ATOM	4032	O	ILE	606	-4.297	20.259	-5.397	1.00	21.59

ATOM	4033	N	SER	607	-3.095	21.854	-4.359	1.00	21.35
ATOM	4034	CA	SER	607	-3.691	22.947	-5.113	1.00	21.40
ATOM	4035	CB	SER	607	-3.042	24.271	-4.712	1.00	23.61
ATOM	4036	OG	SER	607	-3.247	24.522	-3.332	1.00	30.17
ATOM	4037	C	SER	607	-3.552	22.744	-6.618	1.00	20.50
ATOM	4038	O	SER	607	-4.427	23.140	-7.390	1.00	19.39
ATOM	4039	N	LEU	608	-2.448	22.129	-7.025	1.00	20.28
ATOM	4040	CA	LEU	608	-2.194	21.879	-8.437	1.00	20.79
ATOM	4041	CB	LEU	608	-0.773	21.349	-8.636	1.00	22.00
ATOM	4042	CG	LEU	608	0.040	21.923	-9.802	1.00	25.44
ATOM	4043	CD1	LEU	608	1.261	21.050	-10.024	1.00	26.12
ATOM	4044	CD2	LEU	608	-0.794	21.996	-11.055	1.00	26.06
ATOM	4045	C	LEU	608	-3.196	20.859	-8.979	1.00	18.78
ATOM	4046	O	LEU	608	-3.749	21.022	-10.068	1.00	16.08
ATOM	4047	N	LEU	609	-3.425	19.799	-8.216	1.00	16.93
ATOM	4048	CA	LEU	609	-4.355	18.770	-8.645	1.00	15.90
ATOM	4049	CB	LEU	609	-4.284	17.564	-7.715	1.00	14.64
ATOM	4050	CG	LEU	609	-2.919	16.894	-7.626	1.00	16.05
ATOM	4051	CD1	LEU	609	-3.088	15.620	-6.811	1.00	14.29
ATOM	4052	CD2	LEU	609	-2.367	16.582	-9.012	1.00	14.89
ATOM	4053	C	LEU	609	-5.776	19.302	-8.684	1.00	15.23
ATOM	4054	O	LEU	609	-6.549	18.943	-9.564	1.00	16.80
ATOM	4055	N	GLN	610	-6.120	20.157	-7.727	1.00	16.25
ATOM	4056	CA	GLN	610	-7.454	20.734	-7.688	1.00	18.78
ATOM	4057	CB	GLN	610	-7.610	21.601	-6.431	1.00	22.10
ATOM	4058	CG	GLN	610	-9.015	22.149	-6.168	1.00	22.61
ATOM	4059	CD	GLN	610	-10.087	21.070	-6.066	1.00	25.18
ATOM	4060	OE1	GLN	610	-10.864	20.862	-7.000	1.00	25.07
ATOM	4061	NE2	GLN	610	-10.135	20.380	-4.930	1.00	23.46
ATOM	4062	C	GLN	610	-7.606	21.564	-8.962	1.00	19.36
ATOM	4063	O	GLN	610	-8.674	21.599	-9.567	1.00	20.25
ATOM	4064	N	LYS	611	-6.518	22.203	-9.380	1.00	17.95
ATOM	4065	CA	LYS	611	-6.527	23.011	-10.591	1.00	19.00
ATOM	4066	CB	LYS	611	-5.237	23.829	-10.694	1.00	19.60
ATOM	4067	CG	LYS	611	-5.135	24.652	-11.967	1.00	26.12
ATOM	4068	CD	LYS	611	-3.929	25.572	-11.947	1.00	30.05
ATOM	4069	CE	LYS	611	-4.051	26.611	-10.841	1.00	33.03
ATOM	4070	NZ	LYS	611	-2.950	27.626	-10.883	1.00	36.49
ATOM	4071	C	LYS	611	-6.684	22.119	-11.825	1.00	18.37
ATOM	4072	O	LYS	611	-7.438	22.443	-12.743	1.00	17.92
ATOM	4073	N	TYR	612	-5.969	21.000	-11.853	1.00	17.93
ATOM	4074	CA	TYR	612	-6.069	20.072	-12.974	1.00	17.14
ATOM	4075	CB	TYR	612	-5.137	18.873	-12.757	1.00	18.22
ATOM	4076	CG	TYR	612	-3.674	19.182	-13.000	1.00	20.39
ATOM	4077	CD1	TYR	612	-2.672	18.314	-12.568	1.00	20.70
ATOM	4078	CE1	TYR	612	-1.325	18.591	-12.819	1.00	22.32
ATOM	4079	CD2	TYR	612	-3.292	20.335	-13.686	1.00	20.10
ATOM	4080	CE2	TYR	612	-1.952	20.618	-13.941	1.00	22.45
ATOM	4081	CZ	TYR	612	-0.978	19.745	-13.507	1.00	20.89
ATOM	4082	OH	TYR	612	0.343	20.026	-13.781	1.00	24.80
ATOM	4083	C	TYR	612	-7.501	19.586	-13.165	1.00	16.86
ATOM	4084	O	TYR	612	-7.942	19.383	-14.295	1.00	17.28
ATOM	4085	N	LYS	613	-8.233	19.390	-12.068	1.00	16.32
ATOM	4086	CA	LYS	613	-9.618	18.935	-12.192	1.00	15.88
ATOM	4087	CB	LYS	613	-10.229	18.609	-10.821	1.00	14.30
ATOM	4088	CG	LYS	613	-11.689	18.175	-10.928	1.00	17.16
ATOM	4089	CD	LYS	613	-12.164	17.374	-9.723	1.00	17.49
ATOM	4090	CE	LYS	613	-13.620	16.936	-9.921	1.00	18.61
ATOM	4091	NZ	LYS	613	-14.048	15.860	-8.988	1.00	17.77
ATOM	4092	C	LYS	613	-10.422	20.045	-12.869	1.00	16.11
ATOM	4093	O	LYS	613	-11.313	19.786	-13.676	1.00	16.71
ATOM	4094	N	GLN	614	-10.087	21.285	-12.523	1.00	17.86
ATOM	4095	CA	GLN	614	-10.736	22.457	-13.099	1.00	18.80
ATOM	4096	CB	GLN	614	-10.097	23.740	-12.558	1.00	21.10
ATOM	4097	CG	GLN	614	-10.022	23.863	-11.039	1.00	30.74
ATOM	4098	CD	GLN	614	-9.094	24.991	-10.574	1.00	35.26
ATOM	4099	OE1	GLN	614	-8.799	25.925	-11.331	1.00	37.92
ATOM	4100	NE2	GLN	614	-8.645	24.916	-9.315	1.00	33.37
ATOM	4101	C	GLN	614	-10.534	22.416	-14.613	1.00	17.17
ATOM	4102	O	GLN	614	-11.455	22.671	-15.390	1.00	18.11
ATOM	4103	N	GLU	615	-9.314	22.085	-15.016	1.00	16.94
ATOM	4104	CA	GLU	615	-8.945	22.027	-16.426	1.00	16.23
ATOM	4105	CB	GLU	615	-7.451	22.331	-16.557	1.00	16.41
ATOM	4106	CG	GLU	615	-7.071	23.645	-15.899	1.00	16.28
ATOM	4107	CD	GLU	615	-5.579	23.851	-15.792	1.00	16.90
ATOM	4108	OE1	GLU	615	-4.826	22.881	-16.002	1.00	20.30
ATOM	4109	OE2	GLU	615	-5.150	24.981	-15.478	1.00	17.87

ATOM	4110	C	GLU	615	-9.277	20.707	-17.115	1.00	16.72
ATOM	4111	O	GLU	615	-9.025	20.543	-18.310	1.00	16.29
ATOM	4112	N	LYS	616	-9.869	19.778	-16.371	1.00	17.52
ATOM	4113	CA	LYS	616	-10.210	18.460	-16.915	1.00	20.17
ATOM	4114	CB	LYS	616	-11.254	18.567	-18.027	1.00	23.07
ATOM	4115	CG	LYS	616	-12.604	19.120	-17.606	1.00	29.30
ATOM	4116	CD	LYS	616	-13.410	18.131	-16.789	1.00	32.57
ATOM	4117	CE	LYS	616	-14.817	18.660	-16.536	1.00	33.31
ATOM	4118	NZ	LYS	616	-15.508	18.981	-17.807	1.00	38.09
ATOM	4119	C	LYS	616	-8.950	17.815	-17.475	1.00	21.00
ATOM	4120	O	LYS	616	-8.993	17.058	-18.455	1.00	21.94
ATOM	4121	N	LYS	617	-7.818	18.138	-16.864	1.00	18.27
ATOM	4122	CA	LYS	617	-6.557	17.569	-17.298	1.00	17.56
ATOM	4123	CB	LYS	617	-5.427	18.592	-17.183	1.00	20.70
ATOM	4124	CG	LYS	617	-4.111	18.075	-17.736	1.00	23.47
ATOM	4125	CD	LYS	617	-2.959	18.959	-17.311	1.00	27.46
ATOM	4126	CE	LYS	617	-3.104	20.376	-17.847	1.00	28.51
ATOM	4127	NZ	LYS	617	-2.146	21.290	-17.160	1.00	31.20
ATOM	4128	C	LYS	617	-6.266	16.375	-16.399	1.00	16.64
ATOM	4129	O	LYS	617	-5.821	16.535	-15.263	1.00	14.57
ATOM	4130	N	ARG	618	-6.536	15.180	-16.910	1.00	16.67
ATOM	4131	CA	ARG	618	-6.320	13.957	-16.149	1.00	14.83
ATOM	4132	CB	ARG	618	-6.910	12.773	-16.921	1.00	15.62
ATOM	4133	CG	ARG	618	-8.434	12.769	-16.882	1.00	18.58
ATOM	4134	CD	ARG	618	-9.058	11.769	-17.852	1.00	23.21
ATOM	4135	NE	ARG	618	-8.928	12.221	-19.232	1.00	26.25
ATOM	4136	CZ	ARG	618	-9.601	11.709	-20.258	1.00	27.82
ATOM	4137	NH1	ARG	618	-10.458	10.716	-20.060	1.00	27.55
ATOM	4138	NH2	ARG	618	-9.421	12.201	-21.480	1.00	25.20
ATOM	4139	C	ARG	618	-4.838	13.767	-15.865	1.00	15.48
ATOM	4140	O	ARG	618	-3.999	13.923	-16.748	1.00	16.70
ATOM	4141	N	PHE	619	-4.519	13.432	-14.619	1.00	14.70
ATOM	4142	CA	PHE	619	-3.131	13.280	-14.213	1.00	13.63
ATOM	4143	CB	PHE	619	-2.797	14.341	-13.158	1.00	14.26
ATOM	4144	CG	PHE	619	-3.688	14.296	-11.951	1.00	15.87
ATOM	4145	CD1	PHE	619	-3.411	13.431	-10.894	1.00	14.85
ATOM	4146	CD2	PHE	619	-4.816	15.109	-11.875	1.00	17.83
ATOM	4147	CE1	PHE	619	-4.244	13.374	-9.778	1.00	14.51
ATOM	4148	CE2	PHE	619	-5.657	15.062	-10.764	1.00	17.27
ATOM	4149	CZ	PHE	619	-5.370	14.191	-9.711	1.00	15.64
ATOM	4150	C	PHE	619	-2.815	11.896	-13.671	1.00	15.10
ATOM	4151	O	PHE	619	-3.660	11.258	-13.051	1.00	14.55
ATOM	4152	N	ALA	620	-1.586	11.451	-13.903	1.00	13.79
ATOM	4153	CA	ALA	620	-1.144	10.144	-13.440	1.00	14.57
ATOM	4154	CB	ALA	620	-0.186	9.529	-14.460	1.00	14.31
ATOM	4155	C	ALA	620	-0.482	10.194	-12.067	1.00	14.58
ATOM	4156	O	ALA	620	0.149	11.185	-11.687	1.00	13.79
ATOM	4157	N	THR	621	-0.646	9.106	-11.322	1.00	12.87
ATOM	4158	CA	THR	621	-0.073	8.962	-9.994	1.00	14.62
ATOM	4159	CB	THR	621	-1.145	9.145	-8.912	1.00	18.68
ATOM	4160	OG1	THR	621	-1.660	10.482	-8.982	1.00	22.56
ATOM	4161	CG2	THR	621	-0.567	8.893	-7.550	1.00	25.02
ATOM	4162	C	THR	621	0.457	7.538	-9.925	1.00	13.44
ATOM	4163	O	THR	621	-0.023	6.658	-10.643	1.00	13.17
ATOM	4164	N	ILE	622	1.428	7.296	-9.059	1.00	14.11
ATOM	4165	CA	ILE	622	1.984	5.958	-8.979	1.00	14.52
ATOM	4166	CB	ILE	622	3.165	5.825	-9.985	1.00	16.11
ATOM	4167	CG2	ILE	622	4.372	6.630	-9.495	1.00	19.85
ATOM	4168	CG1	ILE	622	3.500	4.352	-10.204	1.00	19.83
ATOM	4169	CD1	ILE	622	4.468	4.118	-11.347	1.00	22.61
ATOM	4170	C	ILE	622	2.443	5.606	-7.570	1.00	13.66
ATOM	4171	O	ILE	622	2.596	6.481	-6.735	1.00	12.92
ATOM	4172	N	THR	623	2.611	4.317	-7.295	1.00	15.34
ATOM	4173	CA	THR	623	3.080	3.914	-5.979	1.00	16.08
ATOM	4174	CB	THR	623	2.611	2.491	-5.595	1.00	16.42
ATOM	4175	OG1	THR	623	3.187	1.540	-6.498	1.00	19.41
ATOM	4176	CG2	THR	623	1.090	2.390	-5.656	1.00	19.47
ATOM	4177	C	THR	623	4.602	3.910	-6.063	1.00	14.73
ATOM	4178	O	THR	623	5.162	3.799	-7.150	1.00	14.80
ATOM	4179	N	ALA	624	5.260	4.030	-4.913	1.00	14.62
ATOM	4180	CA	ALA	624	6.719	4.024	-4.826	1.00	14.05
ATOM	4181	CB	ALA	624	7.282	5.398	-5.187	1.00	13.19
ATOM	4182	C	ALA	624	7.081	3.680	-3.384	1.00	14.67
ATOM	4183	O	ALA	624	6.417	4.135	-2.452	1.00	14.07
ATOM	4184	N	TYR	625	8.126	2.885	-3.186	1.00	14.04
ATOM	4185	CA	TYR	625	8.504	2.522	-1.830	1.00	13.33
ATOM	4186	CB	TYR	625	7.992	1.125	-1.478	1.00	13.65

ATOM	4187	CG	TYR	625	6.658	0.790	-2.089	1.00	11.16
ATOM	4188	CD1	TYR	625	6.587	0.065	-3.277	1.00	13.08
ATOM	4189	CE1	TYR	625	5.367	-0.253	-3.852	1.00	12.70
ATOM	4190	CD2	TYR	625	5.467	1.199	-1.488	1.00	11.45
ATOM	4191	CE2	TYR	625	4.234	0.886	-2.057	1.00	11.45
ATOM	4192	CZ	TYR	625	4.194	0.155	-3.241	1.00	11.70
ATOM	4193	OH	TYR	625	2.993	-0.200	-3.795	1.00	13.12
ATOM	4194	C	TYR	625	9.999	2.555	-1.624	1.00	14.79
ATOM	4195	O	TYR	625	10.500	2.009	-0.640	1.00	12.38
ATOM	4196	N	ASP	626	10.721	3.177	-2.549	1.00	14.45
ATOM	4197	CA	ASP	626	12.166	3.263	-2.410	1.00	16.17
ATOM	4198	CB	ASP	626	12.837	1.949	-2.862	1.00	18.23
ATOM	4199	CG	ASP	626	12.721	1.703	-4.362	1.00	19.53
ATOM	4200	OD1	ASP	626	13.387	2.419	-5.136	1.00	19.59
ATOM	4201	OD2	ASP	626	11.964	0.792	-4.764	1.00	21.03
ATOM	4202	C	ASP	626	12.746	4.454	-3.159	1.00	16.01
ATOM	4203	O	ASP	626	12.091	5.068	-4.009	1.00	15.86
ATOM	4204	N	TYR	627	13.989	4.771	-2.826	1.00	15.06
ATOM	4205	CA	TYR	627	14.695	5.896	-3.419	1.00	15.15
ATOM	4206	CB	TYR	627	16.058	6.039	-2.745	1.00	16.61
ATOM	4207	CG	TYR	627	16.991	7.003	-3.440	1.00	17.55
ATOM	4208	CD1	TYR	627	17.025	8.351	-3.089	1.00	17.88
ATOM	4209	CE1	TYR	627	17.901	9.237	-3.714	1.00	18.86
ATOM	4210	CD2	TYR	627	17.854	6.561	-4.441	1.00	18.63
ATOM	4211	CE2	TYR	627	18.728	7.435	-5.073	1.00	20.28
ATOM	4212	CZ	TYR	627	18.746	8.763	-4.703	1.00	21.00
ATOM	4213	OH	TYR	627	19.624	9.615	-5.330	1.00	23.89
ATOM	4214	C	TYR	627	14.892	5.816	-4.929	1.00	15.66
ATOM	4215	O	TYR	627	14.681	6.797	-5.635	1.00	15.39
ATOM	4216	N	SER	628	15.300	4.653	-5.422	1.00	15.60
ATOM	4217	CA	SER	628	15.568	4.504	-6.842	1.00	16.14
ATOM	4218	CB	SER	628	16.196	3.139	-7.111	1.00	16.61
ATOM	4219	OG	SER	628	17.466	3.068	-6.473	1.00	18.25
ATOM	4220	C	SER	628	14.367	4.733	-7.746	1.00	16.64
ATOM	4221	O	SER	628	14.448	5.505	-8.702	1.00	14.62
ATOM	4222	N	PHE	629	13.249	4.081	-7.462	1.00	16.10
ATOM	4223	CA	PHE	629	12.090	4.303	-8.307	1.00	15.35
ATOM	4224	CB	PHE	629	11.032	3.225	-8.069	1.00	15.85
ATOM	4225	CG	PHE	629	11.350	1.934	-8.769	1.00	16.27
ATOM	4226	CD1	PHE	629	12.022	0.910	-8.108	1.00	15.67
ATOM	4227	CD2	PHE	629	11.039	1.774	-10.118	1.00	14.97
ATOM	4228	CE1	PHE	629	12.381	-0.261	-8.781	1.00	16.45
ATOM	4229	CE2	PHE	629	11.391	0.616	-10.803	1.00	15.51
ATOM	4230	CZ	PHE	629	12.066	-0.408	-10.137	1.00	15.52
ATOM	4231	C	PHE	629	11.526	5.712	-8.131	1.00	15.42
ATOM	4232	O	PHE	629	11.149	6.362	-9.110	1.00	14.31
ATOM	4233	N	ALA	630	11.509	6.210	-6.900	1.00	13.96
ATOM	4234	CA	ALA	630	10.998	7.554	-6.654	1.00	13.58
ATOM	4235	CB	ALA	630	11.058	7.872	-5.164	1.00	15.22
ATOM	4236	C	ALA	630	11.800	8.585	-7.447	1.00	14.75
ATOM	4237	O	ALA	630	11.240	9.526	-8.024	1.00	14.71
ATOM	4238	N	LYS	631	13.115	8.408	-7.467	1.00	15.76
ATOM	4239	CA	LYS	631	14.011	9.312	-8.193	1.00	17.34
ATOM	4240	CB	LYS	631	15.465	8.898	-7.923	1.00	17.65
ATOM	4241	CG	LYS	631	16.529	9.653	-8.706	1.00	23.27
ATOM	4242	CD	LYS	631	16.611	11.105	-8.294	1.00	24.41
ATOM	4243	CE	LYS	631	17.957	11.707	-8.699	1.00	28.34
ATOM	4244	NZ	LYS	631	18.224	11.574	-10.164	1.00	29.72
ATOM	4245	C	LYS	631	13.703	9.244	-9.689	1.00	16.69
ATOM	4246	O	LYS	631	13.628	10.269	-10.375	1.00	17.77
ATOM	4247	N	LEU	632	13.527	8.028	-10.193	1.00	15.74
ATOM	4248	CA	LEU	632	13.224	7.828	-11.606	1.00	14.84
ATOM	4249	CB	LEU	632	13.153	6.334	-11.916	1.00	15.29
ATOM	4250	CG	LEU	632	13.100	5.918	-13.390	1.00	14.76
ATOM	4251	CD1	LEU	632	13.590	4.496	-13.492	1.00	13.45
ATOM	4252	CD2	LEU	632	11.689	6.064	-13.954	1.00	14.18
ATOM	4253	C	LEU	632	11.909	8.503	-11.997	1.00	16.72
ATOM	4254	O	LEU	632	11.834	9.159	-13.035	1.00	15.36
ATOM	4255	N	PHE	633	10.872	8.335	-11.177	1.00	15.97
ATOM	4256	CA	PHE	633	9.581	8.942	-11.477	1.00	17.44
ATOM	4257	CB	PHE	633	8.497	8.463	-10.493	1.00	16.12
ATOM	4258	CG	PHE	633	8.333	6.958	-10.425	1.00	17.21
ATOM	4259	CD1	PHE	633	8.562	6.156	-11.542	1.00	18.33
ATOM	4260	CD2	PHE	633	7.921	6.350	-9.240	1.00	18.31
ATOM	4261	CE1	PHE	633	8.386	4.763	-11.483	1.00	17.53
ATOM	4262	CE2	PHE	633	7.739	4.966	-9.167	1.00	14.83
ATOM	4263	CZ	PHE	633	7.974	4.171	-10.291	1.00	18.33

ATOM	4264	C	PHE	633	9.683	10.464	-11.409	1.00	19.16
ATOM	4265	O	PHE	633	9.128	11.173	-12.251	1.00	20.23
ATOM	4266	N	ALA	634	10.390	10.964	-10.402	1.00	18.95
ATOM	4267	CA	ALA	634	10.561	12.402	-10.235	1.00	20.80
ATOM	4268	CB	ALA	634	11.315	12.697	-8.941	1.00	22.92
ATOM	4269	C	ALA	634	11.314	12.996	-11.423	1.00	21.47
ATOM	4270	O	ALA	634	10.970	14.073	-11.903	1.00	21.11
ATOM	4271	N	ASP	635	12.339	12.296	-11.898	1.00	21.14
ATOM	4272	CA	ASP	635	13.113	12.792	-13.030	1.00	23.15
ATOM	4273	CB	ASP	635	14.366	11.943	-13.249	1.00	24.84
ATOM	4274	CG	ASP	635	15.388	12.102	-12.141	1.00	24.40
ATOM	4275	OD1	ASP	635	15.242	13.015	-11.300	1.00	27.97
ATOM·	4276	OD2	ASP	635	16.349	11.311	-12.127	1.00	26.01
ATOM	4277	C	ASP	635	12.319	12.844	-14.338	1.00	23.85
ATOM	4278	O	ASP	635	12.662	13.606	-15.247	1.00	23.95
ATOM	4279	N	GLU	636	11.269	12.034	-14.434	1.00	22.21
ATOM	4280	CA	GLU	636	10.432	11.986	-15.629	1.00	22.88
ATOM	4281	CB	GLU	636	9.971	10.555	-15.899	1.00	22.80
ATOM	4282	CG	GLU	636	11.087	9.593	-16.233	1.00	24.66
ATOM	4283	CD	GLU	636	11.863	10.024	-17.459	1.00	25.48
ATOM	4284	OE1	GLU	636	11.236	10.200	-18.523	1.00	28.84
ATOM	4285	OE2	GLU	636	13.092	10.186	-17.359	1.00	26.19
ATOM	4286	C	GLU	636	9.203	12.879	-15.543	1.00	21.66
ATOM	4287	O	GLU	636	8.483	13.035	-16.528	1.00	22.31
ATOM	4288	N	GLY	637	8.939	13.435	-14.365	1.00	20.53
ATOM	4289	CA	GLY	637	7.789	14.308	-14.223	1.00	20.79
ATOM	4290	C	GLY	637	6.590	13.755	-13.472	1.00	21.60
ATOM	4291	O	GLY	637	5.582	14.452	-13.348	1.00	22.27
ATOM	4292	N	LEU	638	6.680	12.511	-13.000	1.00	21.20
ATOM	4293	CA	LEU	638	5.599	11.891	-12.228	1.00	22.21
ATOM	4294	CB	LEU	638	5.683	10.361	-12.301	1.00	23.81
ATOM	4295	CG	LEU	638	4.426	9.629	-12.774	1.00	26.98
ATOM	4296	CD1	LEU	638	4.678	8.133	-12.758	1.00	25.19
ATOM	4297	CD2	LEU	638	3.241	9.988	-11.903	1.00	27.34
ATOM	4298	C	LEU	638	5.876	12.355	-10.807	1.00	20.11
ATOM	4299	O	LEU	638	6.683	11.752	-10.094	1.00	22.26
ATOM	4300	N	ASN	639	5.203	13.427	-10.409	1.00	20.38
ATOM	4301	CA	ASN	639	5.415	14.035	-9.105	1.00	18.91
ATOM	4302	CB	ASN	639	5.557	15.555	-9.264	1.00	24.25
ATOM	4303	CG	ASN	639	6.571	15.944	-10.327	1.00	28.84
ATOM	4304	OD1	ASN	639	7.684	15.416	-10.361	1.00	31.74
ATOM	4305	ND2	ASN	639	6.195	16.881	-11.194	1.00	31.59
ATOM	4306	C	ASN	639	4.348	13.747	-8.054	1.00	17.68
ATOM	4307	O	ASN	639	4.240	14.470	-7.061	1.00	16.28
ATOM	4308	N	VAL	640	3.547	12.711	-8.265	1.00	16.43
ATOM	4309	CA	VAL	640	2.518	12.366	-7.289	1.00	15.98
ATOM	4310	CB	VAL	640	1.101	12.590	-7.840	1.00	16.39
ATOM	4311	CG1	VAL	640	0.083	12.203	-6.787	1.00	18.52
ATOM	4312	CG2	VAL	640	0.917·	14.054	-8.224	1.00	18.53
ATOM	4313	C	VAL	640	2.712	10.895	-6.973	1.00	15.29
ATOM	4314	O	VAL	640	2.445	10.036	-7.811	1.00	11.74
ATOM	4315	N	MET	641	3.190	10.618	-5.764	1.00	13.95
ATOM	4316	CA	MET	641	3.477	9.252	-5.362	1.00	14.10
ATOM	4317	CB	MET	641	4.989	9.052	-5.237	1.00	14.03
ATOM	4318	CG	MET	641	5.725	9.242	-6.546	1.00	18.23
ATOM	4319	SD	MET	641	7.481	9.167	-6.340	1.00	18.97
ATOM	4320	CE	MET	641	8.019	10.537	-7.397	1.00	20.65
ATOM	4321	C	MET	641	2.815	8.827	-4.076	1.00	12.89
ATOM	4322	O	MET	641	2.704	9.599	-3.127	1.00	16.15
ATOM	4323	N	LEU	642	2.405	7.569	-4.041	1.00	13.58
ATOM	4324	CA	LEU	642	1.743	7.045	-2.865	1.00	15.28
ATOM	4325	CB	LEU	642	0.330	6.602	-3.257	1.00	19.13
ATOM	4326	CG	LEU	642	-0.652	5.954	-2.276	1.00	23.45
ATOM	4327	CD1	LEU	642	-0.395	4.474	-2.248	1.00	25.41
ATOM	4328	CD2	LEU	642	-0.555	6.576	-0.881	1.00	22.82
ATOM	4329	C	LEU	642	2.533	5.908	-2.230	1.00	15.23
ATOM	4330	O	LEU	642	2.920	4.947	-2.898	1.00	15.25
ATOM	4331	N	VAL	643	2.782	6.053	-0.933	1.00	16.09
ATOM	4332	CA	VAL	643	3.478	5.037	-0.155	1.00	16.71
ATOM	4333	CB	VAL	643	4.389	5.668	0.917	1.00	15.65
ATOM	4334	CG1	VAL	643	5.181	4.576	1.632	1.00	17.25
ATOM	4335	CG2	VAL	643	5.351	6.663	0.261	1.00	20.05
ATOM	4336	C	VAL	643	2.327	4.297	0.508	1.00	15.14
ATOM	4337	O	VAL	643	1.931	4.624	1.624	1.00	15.03
ATOM	4338	N	GLY	644	1.784	3.313	-0.206	1.00	18.13
ATOM	4339	CA	GLY	644	0.646	2.565	0.288	1.00	16.80
ATOM	4340	C	GLY	644	0.948	1.249	0.963	1.00	16.33

ATOM	4341	O	GLY	644	2.038	0.698	0.802	1.00	15.86
ATOM	4342	N	ASP	645	-0.020	0.735	1.717	1.00	15.60
ATOM	4343	CA	ASP	645	0.200	-0.529	2.411	1.00	16.74
ATOM	4344	CB	ASP	645	-0.837	-0.755	3.521	1.00	15.16
ATOM	4345	CG	ASP	645	-2.268	-0.790	3.017	1.00	16.47
ATOM	4346	OD1	ASP	645	-2.499	-0.772	1.794	1.00	12.97
ATOM	4347	OD2	ASP	645	-3.178	-0.843	3.875	1.00	16.97
ATOM	4348	C	ASP	645	0.258	-1.703	1.446	1.00	15.61
ATOM	4349	O	ASP	645	0.406	-2.856	1.860	1.00	18.52
ATOM	4350	N	SER	646	0.169	-1.399	0.151	1.00	14.45
ATOM	4351	CA	SER	646	0.283	-2.425	-0.879	1.00	12.93
ATOM	4352	CB	SER	646	0.062	-1.821	-2.266	1.00	14.70
ATOM	4353	OG	SER	646	0.943	-0.726	-2.478	1.00	16.74
ATOM	4354	C	SER	646	1.695	-2.994	-0.801	1.00	13.99
ATOM	4355	O	SER	646	1.969	-4.085	-1.308	1.00	15.91
ATOM	4356	N	LEU	647	2.596	-2.248	-0.170	1.00	11.90
ATOM	4357	CA	LEU	647	3.977	-2.702	-0.031	1.00	12.24
ATOM	4358	CB	LEU	647	4.839	-1.599	0.601	1.00	12.62
ATOM	4359	CG	LEU	647	4.542	-1.162	2.038	1.00	13.54
ATOM	4360	CD1	LEU	647	5.201	-2.120	3.026	1.00	15.69
ATOM	4361	CD2	LEU	647	5.062	0.254	2.247	1.00	14.93
ATOM	4362	C	LEU	647	4.015	-3.975	0.818	1.00	12.53
ATOM	4363	O	LEU	647	4.983	-4.728	0.765	1.00	13.66
ATOM	4364	N	GLY	648	2.954	-4.216	1.586	1.00	12.76
ATOM	4365	CA	GLY	648	2.910	-5.410	2.417	1.00	12.76
ATOM	4366	C	GLY	648	2.941	-6.654	1.554	1.00	13.52
ATOM	4367	O	GLY	648	3.395	-7.720	1.973	1.00	12.64
ATOM	4368	N	MET	649	2.456	-6.510	0.328	1.00	13.40
ATOM	4369	CA	MET	649	2.434	-7.615	-0.611	1.00	13.82
ATOM	4370	CB	MET	649	1.068	-7.672	-1.307	1.00	15.15
ATOM	4371	CG	MET	649	-0.080	-7.870	-0.326	1.00	19.61
ATOM	4372	SD	MET	649	-1.749	-7.781	-1.021	1.00	23.07
ATOM	4373	CE	MET	649	-1.676	-9.060	-2.275	1.00	19.40
ATOM	4374	C	MET	649	3.563	-7.497	-1.631	1.00	14.32
ATOM	4375	O	MET	649	4.352	-8.418	-1.802	1.00	13.75
ATOM	4376	N	THR	650	3.678	-6.353	-2.290	1.00	12.15
ATOM	4377	CA	THR	650	4.717	-6.216	-3.303	1.00	13.72
ATOM	4378	CB	THR	650	4.416	-5.015	-4.221	1.00	15.77
ATOM	4379	OG1	THR	650	4.506	-3.803	-3.475	1.00	21.01
ATOM	4380	CG2	THR	650	3.011	-5.143	-4.785	1.00	15.50
ATOM	4381	C	THR	650	6.144	-6.135	-2.776	1.00	12.32
ATOM	4382	O	THR	650	7.089	-6.565	-3.445	1.00	11.07
ATOM	4383	N	VAL	651	6.310	-5.595	-1.576	1.00	11.93
ATOM	4384	CA	VAL	651	7.645	-5.477	-0.995	1.00	12.05
ATOM	4385	CB	VAL	651	7.845	-4.079	-0.358	1.00	12.18
ATOM	4386	CG1	VAL	651	9.211	-3.993	0.316	1.00	13.43
ATOM	4387	CG2	VAL	651	7.711	-3.005	-1.423	1.00	13.62
ATOM	4388	C	VAL	651	7.895	-6.557	0.057	1.00	11.83
ATOM	4389	O	VAL	651	8.858	-7.316	-0.035	1.00	12.12
ATOM	4390	N	GLN	652	7.018	-6.640	1.049	1.00	12.39
ATOM	4391	CA	GLN	652	7.204	-7.615	2.123	1.00	13.70
ATOM	4392	CB	GLN	652	6.420	-7.177	3.350	1.00	13.40
ATOM	4393	CG	GLN	652	6.796	-5.783	3.818	1.00	13.66
ATOM	4394	CD	GLN	652	6.004	-5.362	5.028	1.00	13.82
ATOM	4395	OE1	GLN	652	4.978	-5.962	5.340	1.00	14.37
ATOM	4396	NE2	GLN	652	6.464	-4.319	5.713	1.00	9.59
ATOM	4397	C	GLN	652	6.845	-9.053	1.770	1.00	13.88
ATOM	4398	O	GLN	652	7.356	-9.982	2.388	1.00	14.21
ATOM	4399	N	GLY	653	5.957	-9.239	0.799	1.00	12.48
ATOM	4400	CA	GLY	653	5.595	-10.590	0.408	1.00	14.75
ATOM	4401	C	GLY	653	4.474	-11.249	1.193	1.00	14.96
ATOM	4402	O	GLY	653	4.323	-12.468	1.144	1.00	14.96
ATOM	4403	N	HIS	654	3.693	-10.461	1.924	1.00	14.70
ATOM	4404	CA	HIS	654	2.572	-11.008	2.678	1.00	18.41
ATOM	4405	CB	HIS	654	2.150	-10.052	3.792	1.00	15.90
ATOM	4406	CG	HIS	654	3.191	-9.857	4.844	1.00	17.16
ATOM	4407	CD2	HIS	654	3.830	-8.740	5.265	1.00	12.42
ATOM	4408	ND1	HIS	654	3.677	-10.892	5.614	1.00	15.54
ATOM	4409	CE1	HIS	654	4.571	-10.421	6.463	1.00	17.70
ATOM	4410	NE2	HIS	654	4.683	-9.118	6.272	1.00	15.36
ATOM	4411	C	HIS	654	1.387	-11.248	1.745	1.00	18.82
ATOM	4412	O	HIS	654	1.349	-10.723	0.631	1.00	20.21
ATOM	4413	N	ASP	655	0.420	-12.034	2.216	1.00	19.49
ATOM	4414	CA	ASP	655	-0.769	-12.374	1.436	1.00	20.72
ATOM	4415	CB	ASP	655	-1.406	-13.663	1.978	1.00	25.65
ATOM	4416	CG	ASP	655	-2.228	-13.426	3.234	1.00	28.75
ATOM	4417	OD1	ASP	655	-3.324	-12.830	3.133	1.00	36.14

ATOM	4418	OD2	ASP	655	-1.789	-13.825	4.330	1.00	34.78
ATOM	4419	C	ASP	655	-1.815	-11.263	1.458	1.00	19.20
ATOM	4420	O	ASP	655	-2.805	-11.320	0.729	1.00	20.52
ATOM	4421	N	SER	656	-1.610	-10.267	2.310	1.00	16.01
ATOM	4422	CA	SER	656	-2.545	-9.149	2.407	1.00	14.62
ATOM	4423	CB	SER	656	-3.663	-9.467	3.402	1.00	14.60
ATOM	4424	OG	SER	656	-3.203	-9.327	4.731	1.00	13.62
ATOM	4425	C	SER	656	-1.771	-7.940	2.897	1.00	11.97
ATOM	4426	O	SER	656	-0.579	-8.031	3.185	1.00	11.43
ATOM	4427	N	THR	657	-2.447	-6.801	2.993	1.00	13.16
ATOM	4428	CA	THR	657	-1.801	-5.578	3.461	1.00	12.70
ATOM	4429	CB	THR	657	-2.433	-4.325	2.799	1.00	14.37
ATOM	4430	OG1	THR	657	-3.782	-4.183	3.240	1.00	14.29
ATOM	4431	CG2	THR	657	-2.421	-4.441	1.279	1.00	16.57
ATOM	4432	C	THR	657	-1.852	-5.394	4.980	1.00	12.71
ATOM	4433	O	THR	657	-1.148	-4.550	5.519	1.00	13.29
ATOM	4434	N	LEU	658	-2.675	-6.177	5.675	1.00	14.03
ATOM	4435	CA	LEU	658	-2.823	-6.012	7.135	1.00	13.77
ATOM	4436	CB	LEU	658	-3.780	-7.076	7.692	1.00	15.46
ATOM	4437	CG	LEU	658	-5.279	-6.806	7.474	1.00	17.50
ATOM	4438	CD1	LEU	658	-5.634	-7.040	6.012	1.00	21.01
ATOM	4439	CD2	LEU	658	-6.099	-7.729	8.372	1.00	18.31
ATOM	4440	C	LEU	658	-1.561	-5.951	8.003	1.00	12.69
ATOM	4441	O	LEU	658	-1.485	-5.150	8.927	1.00	12.58
ATOM	4442	N	PRO	659	-0.558	-6.799	7.722	1.00	14.97
ATOM	4443	CD	PRO	659	-0.581	-7.923	6.772	1.00	12.48
ATOM	4444	CA	PRO	659	0.685	-6.810	8.501	1.00	12.86
ATOM	4445	CB	PRO	659	1.425	-8.038.	7.957	1.00	14.97
ATOM	4446	CG	PRO	659	0.870	-8.175	6.570	1.00	21.34
ATOM	4447	C	PRO	659	1.540	-5.546	8.448	1.00	13.36
ATOM	4448	O	PRO	659	2.434	-5.365	9.273	1.00	14.03
ATOM	4449	N	VAL	660	1.271	-4.668	7.487	1.00	13.75
ATOM	4450	CA	VAL	660	2.031	-3.427	7.358	1.00	12.32
ATOM	4451	CB	VAL	660	1.619	-2.672	6.069	1.00	12.31
ATOM	4452	CG1	VAL	660	2.316	-1.318	5.990	1.00	13.70
ATOM	4453	CG2	VAL	660	1.962	-3.515	4.868	1.00	10.14
ATOM	4454	C	VAL	660	1.794	-2.536	8.563	1.00	13.42
ATOM	4455	O	VAL	660	0.649	-2.261	8.936	1.00	14.34
ATOM	4456	N	THR	661	2.878	-2.077	9.176	1.00	11.86
ATOM	4457	CA	THR	661	2.772	-1.221	10.357	1.00	15.36
ATOM	4458	CB	THR	661	3.795	-1.640	11.439	1.00	17.87
ATOM	4459	OG1	THR	661	3.640	-3.039	11.736	1.00	21.53
ATOM	4460	CG2	THR	661	3.569	-0.835	12.720	1.00	22.77
ATOM	4461	C	THR	661	3.051	0.233	9.998	1.00	14.14
ATOM	4462	O	THR	661	3.553	0.517	8.916	1.00	11.93
ATOM	4463	N	VAL	662	2.722	1.141	10.912	1.00	13.31
ATOM	4464	CA	VAL	662	2.969	2.560	10.712	1.00	15.63
ATOM	4465	CB	VAL	662	2.465	3.395	11.912	1.00	15.72
ATOM	4466	CG1	VAL	662	3.002	4.809	11.832	1.00	18.60
ATOM	4467	CG2	VAL	662	0.938	3.412	11.921	1.00	15.56
ATOM	4468	C	VAL	662	4.471	2.758	10.556	1.00	15.26
ATOM	4469	O	VAL	662	4.913	3.566	9.740	1.00	15.83
ATOM	4470	N	ALA	663	5.255	2.004	11.323	1.00	14.05
ATOM	4471	CA	ALA	663	6.707	2.100	11.236	1.00	14.62
ATOM	4472	CB	ALA	663	7.364	1.189	12.278	1.00	15.71
ATOM	4473	C	ALA	663	7.178	1.733	9.830	1.00	14.13
ATOM	4474	O	ALA	663	8.092	2.370	9.302	1.00	13.75
ATOM	4475	N	ASP	664	6.556	0.729	9.210	1.00	14.22
ATOM	4476	CA	ASP	664	6.966	0.354	7.849	1.00	13.17
ATOM	4477	CB	ASP	664	6.232	-0.886	7.327	1.00	13.69
ATOM	4478	CG	ASP	664	6.434	-2.115	8.200	1.00	11.91
ATOM	4479	OD1	ASP	664	7.525	-2.275	8.780	1.00	10.98
ATOM	4480	OD2	ASP	664	5.494	-2.925	8.257	1.00	14.69
ATOM	4481	C	ASP	664	6.650	1.494	6.895	1.00	12.45
ATOM	4482	O	ASP	664	7.472	1.838	6.047	1.00	10.45
ATOM	4483	N	ILE	665	5.454	2.067	7.015	1.00	11.31
ATOM	4484	CA	ILE	665	5.088	3.165	6.126	1.00	11.92
ATOM	4485	CB	ILE	665	3.680	3.717	6.429	1.00	13.42
ATOM	4486	CG2	ILE	665	3.406	4.942	5.556	1.00	14.44
ATOM	4487	CG1	ILE	665	2.621	2.645	6.162	1.00	11.06
ATOM	4488	CD1	ILE	665	2.482	2.252	4.704	1.00	14.31
ATOM	4489	C	ILE	665	6.097	4.299	6.243	1.00	12.95
ATOM	4490	O	ILE	665	6.547	4.845	5.227	1.00	12.47
ATOM	4491	N	ALA	666	6.453	4.643	7.481	1.00	13.58
ATOM	4492	CA	ALA	666	7.406	5.725	7.764	1.00	13.36
ATOM	4493	CB	ALA	666	7.528	5.929	9.275	1.00	13.24
ATOM	4494	C	ALA	666	8.788	5.468	7.167	1.00	13.44

ATOM	4495	O	ALA	666	9.435	6.386	6.656	1.00	11.50
ATOM	4496	N	TYR	667	9.232	4.215	7.242	1.00	12.26
ATOM	4497	CA	TYR	667	10.528	3.806	6.703	1.00	12.09
ATOM	4498	CB	TYR	667	10.760	2.315	6.987	1.00	12.31
ATOM	4499	CG	TYR	667	12.002	1.719	6.345	1.00	11.83
ATOM	4500	CD1	TYR	667	13.277	1.995	6.845	1.00	13.98
ATOM	4501	CE1	TYR	667	14.418	1.421	6.275	1.00	14.36
ATOM	4502	CD2	TYR	667	11.897	0.855	5.252	1.00	15.01
ATOM	4503	CE2	TYR	667	13.027	0.280	4.673	1.00	13.37
ATOM	4504	CZ	TYR	667	14.286	0.568	5.189	1.00	15.02
ATOM	4505	OH	TYR	667	15.404	0.011	4.612	1.00	14.89
ATOM	4506	C	TYR	667	10.556	4.050	5.194	1.00	11.94
ATOM	4507	O	TYR	667	11.453	4.712	4.672	1.00	9.26
ATOM	4508	N	HIS	668	9.565	3.501	4.499	1.00	12.01
ATOM	4509	CA	HIS	668	9.473	3.670	3.057	1.00	13.41
ATOM	4510	CB	HIS	668	8.423	2.713	2.486	1.00	12.37
ATOM	4511	CG	HIS	668	8.849	1.278	2.536	1.00	11.83
ATOM	4512	CD2	HIS	668	8.557	0.293	3.419	1.00	11.45
ATOM	4513	ND1	HIS	668	9.774	0.746	1.663	1.00	13.13
ATOM	4514	CE1	HIS	668	10.038	-0.503	2.008	1.00	11.30
ATOM	4515	NE2	HIS	668	9.312	-0.801	3.071	1.00	11.79
ATOM	4516	C	HIS	668	9.159	5.117	2.682	1.00	14.60
ATOM	4517	O	HIS	668	9.641	5.618	1.662	1.00	16.39
ATOM	4518	N	THR	669	8.369	5.803	3.501	1.00	15.65
ATOM	4519	CA	THR	669	8.042	7.197	3.202	1.00	16.31
ATOM	4520	CB	THR	669	7.070	7.797	4.250	1.00	15.04
ATOM	4521	OG1	THR	669	5.787	7.170	4.110	1.00	15.98
ATOM	4522	CG2	THR	669	6.914	9.314	4.036	1.00	15.38
ATOM	4523	C	THR	669	9.313	8.046	3.133	1.00	15.41
ATOM	4524	O	THR	669	9.495	8.841	2.202	1.00	15.01
ATOM	4525	N	ALA	670	10.205	7.858	4.104	1.00	15.82
ATOM	4526	CA	ALA	670	11.458	8.615	4.151	1.00	14.91
ATOM	4527	CB	ALA	670	12.230	8.272	5.426	1.00	16.01
ATOM	4528	C	ALA	670	12.333	8.349	2.934	1.00	16.09
ATOM	4529	O	ALA	670	13.005	9.255	2.416	1.00	14.84
ATOM	4530	N	ALA	671	12.337	7.098	2.483	1.00	15.41
ATOM	4531	CA	ALA	671	13.141	6.713	1.327	1.00	15.41
ATOM	4532	CB	ALA	671	13.162	5.184	1.190	1.00	14.87
ATOM	4533	C	ALA	671	12.606	7.359	0.049	1.00	16.10
ATOM	4534	O	ALA	671	13.377	7.832	-0.794	1.00	14.32
ATOM	4535	N	VAL	672	11.285	7.382	-0.096	1.00	14.00
ATOM	4536	CA	VAL	672	10.677	8.000	-1.269	1.00	14.46
ATOM	4537	CB	VAL	672	9.148	7.738	-1.313	1.00	15.01
ATOM	4538	CG1	VAL	672	8.482	8.651	-2.351	1.00	15.50
ATOM	4539	CG2	VAL	672	8.891	6.278	-1.686	1.00	16.48
ATOM	4540	C	VAL	672	10.933	9.508	-1.270	1.00	14.16
ATOM	4541	O	VAL	672	11.181	10.108	-2.322	1.00	15.05
ATOM	4542	N	ARG	673	10.883	10.125	-0.095	1.00	13.51
ATOM	4543	CA	ARG	673	11.109	11.564	-0.010	1.00	15.06
ATOM	4544	CB	ARG	673	10.777	12.086	1.390	1.00	15.22
ATOM	4545	CG	ARG	673	11.038	13.580	1.570	1.00	16.26
ATOM	4546	CD	ARG	673	10.302	14.412	0.532	1.00	15.12
ATOM	4547	NE	ARG	673	8.877	14.529	0.829	1.00	16.62
ATOM	4548	CZ	ARG	673	7.983	15.058	0.001	1.00	17.11
ATOM	4549	NH1	ARG	673	8.361	15.518	-1.187	1.00	16.70
ATOM	4550	NH2	ARG	673	6.712	15.137	0.361	1.00	15.79
ATOM	4551	C	ARG	673	12.535	11.937	-0.384	1.00	16.05
ATOM	4552	O	ARG	673	12.764	12.998	-0.963	1.00	16.70
ATOM	4553	N	ARG	674	13.490	11.072	-0.050	1.00	15.93
ATOM	4554	CA	ARG	674	14.883	11.332	-0.394	1.00	17.55
ATOM	4555	CB	ARG	674	15.814	10.311	0.279	1.00	17.79
ATOM	4556	CG	ARG	674	15.769	10.334	1.806	1.00	17.42
ATOM	4557	CD	ARG	674	16.944	9.589	2.437	1.00	19.60
ATOM	4558	NE	ARG	674	16.811	9.507	3.894	1.00	22.66
ATOM	4559	CZ	ARG	674	16.242	8.494	4.544	1.00	21.67
ATOM	4560	NH1	ARG	674	15.755	7.458	3.874	1.00	19.18
ATOM	4561	NH2	ARG	674	16.149	8.519	5.866	1.00	22.65
ATOM	4562	C	ARG	674	15.045	11.264	-1.917	1.00	18.81
ATOM	4563	O	ARG	674	15.865	11.978	-2.489	1.00	17.29
ATOM	4564	N	GLY	675	14.250	10.418	-2.568	1.00	18.30
ATOM	4565	CA	GLY	675	14.338	10.292	-4.013	1.00	18.96
ATOM	4566	C	GLY	675	13.602	11.384	-4.770	1.00	19.21
ATOM	4567	O	GLY	675	13.982	11.737	-5.890	1.00	17.51
ATOM	4568	N	ALA	676	12.548	11.916	-4.160	1.00	19.23
ATOM	4569	CA	ALA	676	11.737	12.969	-4.771	1.00	21.38
ATOM	4570	CB	ALA	676	10.515	12.347	-5.445	1.00	22.27
ATOM	4571	C	ALA	676	11.291	14.003	-3.731	1.00	21.87

ATOM	4572	O	ALA	676	10.160	13.970	-3.260	1.00	21.80
ATOM	4573	N	PRO	677	12.174	14.951	-3.376	1.00	23.81
ATOM	4574	CD	PRO	677	13.544	15.130	-3.888	1.00	24.84
ATOM	4575	CA	PRO	677	11.854	15.984	-2.384	1.00	24.40
ATOM	4576	CB	PRO	677	13.204	16.654	-2.140	1.00	24.98
ATOM	4577	CG	PRO	677	13.859	16.554	-3.459	1.00	25.58
ATOM	4578	C	PRO	677	10.774	16.989	-2.762	1.00	23.70
ATOM	4579	O	PRO	677	10.197	17.640	-1.891	1.00	25.65
ATOM	4580	N	ASN	678	10.496	17.114	-4.054	1.00	24.73
ATOM	4581	CA	ASN	678	9.483	18.057	-4.497	1.00	24.76
ATOM	4582	CB	ASN	678	9.994	18.852	-5.706	1.00	27.05
ATOM	4583	CG	ASN	678	11.256	19.634	-5.395	1.00	30.19
ATOM	4584	OD1	ASN	678	11.303	20.400	-4.430	1.00	31.87
ATOM	4585	ND2	ASN	678	12.291	19.443	-6.212	1.00	31.96
ATOM	4586	C	ASN	678	8.164	17.385	-4.845	1.00	22.32
ATOM	4587	O	ASN	678	7.206	18.056	-5.205	1.00	21.78
ATOM	4588	N	CYS	679	8.093	16.064	-4.731	1.00	21.57
ATOM	4589	CA	CYS	679	6.845	15.393	-5.080	1.00	20.82
ATOM	4590	CB	CYS	679	7.088	13.904	-5.328	1.00	22.07
ATOM	4591	SG	CYS	679	6.942	12.839	-3.863	1.00	21.95
ATOM	4592	C	CYS	679	5.761	15.549	-4.017	1.00	20.00
ATOM	4593	O	CYS	679	6.045	15.896	-2.871	1.00	20.40
ATOM	4594	N	LEU	680	4.513	15.336	-4.432	1.00	19.40
ATOM	4595	CA	LEU	680	3.380	15.365	-3.520	1.00	18.90
ATOM	4596	CB	LEU	680	2.074	15.699	-4.242	1.00	17.17
ATOM	4597	CG	LEU	680	0.812	15.597	-3.385	1.00	16.51
ATOM	4598	CD1	LEU	680	0.927	16.514	-2.164	1.00	17.54
ATOM	4599	CD2	LEU	680	-0.406	15.947	-4.211	1.00	16.35
ATOM	4600	C	LEU	680	3.354	13.917	-3.056	1.00	18.47
ATOM	4601	O	LEU	680	3.069	13.014	-3.846	1.00	17.45
ATOM	4602	N	LEU	681	3.659	13.699	-1.782	1.00	18.84
ATOM	4603	CA	LEU	681	3.734	12.346	-1.245	1.00	18.21
ATOM	4604	CB	LEU	681	5.054	12.192	-0.474	1.00	18.92
ATOM	4605	CG	LEU	681	5.611	10.804	-0.137	1.00	20.05
ATOM	4606	CD1	LEU	681	7.014	10.970	0.436	1.00	18.66
ATOM	4607	CD2	LEU	681	4.714	10.091	0.868	1.00	21.30
ATOM	4608	C	LEU	681	2.566	11.966	-0.353	1.00	16.59
ATOM	4609	O	LEU	681	2.356	12.562	0.701	1.00	16.26
ATOM	4610	N	LEU	682	1.802	10.974	-0.790	1.00	16.90
ATOM	4611	CA	LEU	682	0.677	10.491	-0.007	1.00	17.13
ATOM	4612	CB	LEU	682	-0.520	10.151	-0.900	1.00	18.79
ATOM	4613	CG	LEU	682	-1.449	11.291	-1.333	1.00	22.69
ATOM	4614	CD1	LEU	682	-0.700	12.278	-2.227	1.00	23.30
ATOM	4615	CD2	LEU	682	-2.640	10.700	-2.070	1.00	23.40
ATOM	4616	C	LEU	682	1.156	9.233	0.690	1.00	16.92
ATOM	4617	O	LEU	682	1.870	8.430	0.098	1.00	18.52
ATOM	4618	N	ALA	683	0.803	9.074	1.957	1.00	14.89
ATOM	4619	CA	ALA	683	1.195	7.869	2.682	1.00	14.34
ATOM	4620	CB	ALA	683	2.223	8.201	3.753	1.00	14.56
ATOM	4621	C	ALA	683	-0.049	7.260	3.308	1.00	13.19
ATOM	4622	O	ALA	683	-0.893	7.967	3.857	1.00	12.69
ATOM	4623	N	ASP	684	-0.161	5.943	3.204	1.00	13.76
ATOM	4624	CA	ASP	684	-1.292	5.224	3.761	1.00	13.79
ATOM	4625	CB	ASP	684	-1.369	3.811	3.199	1.00	17.15
ATOM	4626	CG	ASP	684	-2.237	3.701	1.972	1.00	18.93
ATOM	4627	OD1	ASP	684	-2.988	4.647	1.660	1.00	17.43
ATOM	4628	OD2	ASP	684	-2.174	2.630	1.334	1.00	19.86
ATOM	4629	C	ASP	684	-1.192	5.050	5.256	1.00	14.01
ATOM	4630	O	ASP	684	-0.098	4.854	5.791	1.00	13.68
ATOM	4631	N	LEU	685	-2.329	5.126	5.938	1.00	14.34
ATOM	4632	CA	LEU	685	-2.335	4.819	7.359	1.00	15.73
ATOM	4633	CB	LEU	685	-3.430	5.568	8.128	1.00	17.73
ATOM	4634	CG	LEU	685	-3.114	7.008	8.538	1.00	18.92
ATOM	4635	CD1	LEU	685	-4.058	7.437	9.658	1.00	20.70
ATOM	4636	CD2	LEU	685	-1.670	7.106	9.013	1.00	20.52
ATOM	4637	C	LEU	685	-2.713	3.346	7.219	1.00	15.76
ATOM	4638	O	LEU	685	-3.731	3.022	6.616	1.00	14.86
ATOM	4639	N	PRO	686	-1.876	2.433	7.734	1.00	15.32
ATOM	4640	CD	PRO	686	-0.579	2.697	8.380	1.00	16.43
ATOM	4641	CA	PRO	686	-2.139	0.996	7.643	1.00	16.10
ATOM	4642	CB	PRO	686	-0.809	0.380	8.085	1.00	17.06
ATOM	4643	CG	PRO	686	-0.283	1.383	9.073	1.00	16.35
ATOM	4644	C	PRO	686	-3.327	0.488	8.458	1.00	16.41
ATOM	4645	O	PRO	686	-4.008	1.254	9.143	1.00	16.37
ATOM	4646	N	PHE	687	-3.563	-0.815	8.358	1.00	15.03
ATOM	4647	CA	PHE	687	-4.647	-1.494	9.062	1.00	15.40
ATOM	4648	CB	PHE	687	-4.470	-3.007	8.892	1.00	14.01

ATOM	4649	CG	PHE	687	-5.265	-3.841	9.861	1.00	15.81
ATOM	4650	CD1	PHE	687	-6.655	-3.762	9.905	1.00	16.16
ATOM	4651	CD2	PHE	687	-4.619	-4.758	10.685	1.00	14.41
ATOM	4652	CE1	PHE	687	-7.390	-4.595	10.751	1.00	16.59
ATOM	4653	CE2	PHE	687	-5.337	-5.597	11.535	1.00	14.28
ATOM	4654	CZ	PHE	687	-6.726	-5.516	11.568	1.00	18.27
ATOM	4655	C	PHE	687	-4.663	-1.106	10.538	1.00	13.34
ATOM	4656	O	PHE	687	-3.634	-1.136	11.209	1.00	12.84
ATOM	4657	N	MET	688	-5.841	-0.732	11.027	1.00	14.65
ATOM	4658	CA	MET	688	-6.035	-0.332	12.418	1.00	14.46
ATOM	4659	CB	MET	688	-5.922	-1.558	13.340	1.00	16.06
ATOM	4660	CG	MET	688	-6.712	-1.415	14.648	1.00	16.59
ATOM	4661	SD	MET	688	-8.529	-1.347	14.400	1.00	16.99
ATOM	4662	CE	MET	688	-8.858	-3.054	14.056	1.00	19.17
ATOM	4663	C	MET	688	-5.087	0.767	12.911	1.00	14.94
ATOM	4664	O	MET	688	-4.718	0.793	14.087	1.00	18.65
ATOM	4665	N	ALA	689	-4.680	1.676	12.031	1.00	14.13
ATOM	4666	CA	ALA	689	-3.803	2.765	12.466	1.00	13.66
ATOM	4667	CB	ALA	689	-2.719	3.034	11.421	1.00	15.41
ATOM	4668	C	ALA	689	-4.610	4.046	12.716	1.00	13.55
ATOM	4669	O	ALA	689	-4.051	5.085	13.051	1.00	14.39
ATOM	4670	N	TYR	690	-5.923	3.971	12.545	1.00	13.83
ATOM	4671	CA	TYR	690	-6.775	5.133	12.763	1.00	13.76
ATOM	4672	CB	TYR	690	-7.009	5.875	11.433	1.00	14.18
ATOM	4673	CG	TYR	690	-7.351	4.979	10.261	1.00	12.90
ATOM	4674	CD1	TYR	690	-8.666	4.841	9.818	1.00	12.68
ATOM	4675	CE1	TYR	690	-8.981	4.004	8.741	1.00	13.27
ATOM	4676	CD2	TYR	690	-6.352	4.257	9.599	1.00	13.42
ATOM	4677	CE2	TYR	690	-6.651	3.418	8.526	1.00	14.00
ATOM	4678	CZ	TYR	690	-7.963	3.297	8.101	1.00	13.04
ATOM	4679	OH	TYR	690	-8.246	2.468	7.030	1.00	14.87
ATOM	4680	C	TYR	690	-8.087	4.693	13.392	1.00	14.99
ATOM	4681	O	TYR	690	-9.166	5.144	13.005	1.00	15.19
ATOM	4682	N	ALA	691	-7.975	3.809	14.382	1.00	13.50
ATOM	4683	CA	ALA	691	-9.135	3.239	15.082	1.00	14.83
ATOM	4684	CB	ALA	691	-8.673	2.102	15.993	1.00	13.88
ATOM	4685	C	ALA	691	-9.924	4.257	15.888	1.00	13.52
ATOM	4686	O	ALA	691	-11.120	4.084	16.110	1.00	14.21
ATOM	4687	N	THR	692	-9.235	5.293	16.354	1.00	15.07
ATOM	4688	CA	THR	692	-9.856	6.374	17.109	1.00	16.94
ATOM	4689	CB	THR	692	-9.608	6.268	18.629	1.00	14.55
ATOM	4690	OG1	THR	692	-8.219	6.492	18.902	1.00	15.54
ATOM	4691	CG2	THR	692	-10.015	4.897	19.152	1.00	15.71
ATOM	4692	C	THR	692	-9.165	7.635	16.636	1.00	18.24
ATOM	4693	O	THR	692	-8.080	7.576	16.059	1.00	18.19
ATOM	4694	N	PRO	693	-9.790	8.794	16.864	1.00	17.17
ATOM	4695	CD	PRO	693	-11.169	8.968	17.351	1.00	18.47
ATOM	4696	CA	PRO	693	-9.209	10.074	16.457	1.00	18.57
ATOM	4697	CB	PRO	693	-10.195	11.090	17.032	1.00	20.23
ATOM	4698	CG	PRO	693	-11.512	10.368	16.873	1.00	19.28
ATOM	4699	C	PRO	693	-7.801	10.241	17.021	1.00	18.65
ATOM	4700	O	PRO	693	-6.853	10.516	16.283	1.00	15.76
ATOM	4701	N	GLU	694	-7.668	10.064	18.334	1.00	18.32
ATOM	4702	CA	GLU	694	-6.371	10.194	18.987	1.00	21.05
ATOM	4703	CB	GLU	694	-6.485	9.871	20.486	1.00	24.65
ATOM	4704	CG	GLU	694	-6.958	11.039	21.341	1.00	32.62
ATOM	4705	CD	GLU	694	-6.747	10.804	22.832	1.00	35.61
ATOM	4706	OE1	GLU	694	-5.624	10.413	23.221	1.00	40.42
ATOM	4707	OE2	GLU	694	-7.694	11.024	23.616	1.00	40.47
ATOM	4708	C	GLU	694	-5.290	9.321	18.352	1.00	18.88
ATOM	4709	O	GLU	694	-4.156	9.766	18.181	1.00	19.69
ATOM	4710	N	GLN	695	-5.621	8.078	18.013	1.00	18.90
ATOM	4711	CA	GLN	695	-4.623	7.207	17.383	1.00	17.55
ATOM	4712	CB	GLN	695	-5.095	5.759	17.375	1.00	19.52
ATOM	4713	CG	GLN	695	-5.109	5.143	18.762	1.00	25.76
ATOM	4714	CD	GLN	695	-5.606	3.722	18.754	1.00	26.70
ATOM	4715	OE1	GLN	695	-5.007	2.849	18.128	1.00	28.17
ATOM	4716	NE2	GLN	695	-6.709	3.477	19.455	1.00	28.69
ATOM	4717	C	GLN	695	-4.332	7.671	15.961	1.00	14.39
ATOM	4718	O	GLN	695	-3.197	7.598	15.498	1.00	14.23
ATOM	4719	N	ALA	696	-5.365	8.134	15.269	1.00	13.25
ATOM	4720	CA	ALA	696	-5.187	8.637	13.913	1.00	12.91
ATOM	4721	CB	ALA	696	-6.517	9.128	13.352	1.00	12.84
ATOM	4722	C	ALA	696	-4.184	9.786	13.965	1.00	13.88
ATOM	4723	O	ALA	696	-3.254	9.849	13.158	1.00	14.82
ATOM	4724	N	PHE	697	-4.371	10.691	14.924	1.00	13.95
ATOM	4725	CA	PHE	697	-3.478	11.849	15.071	1.00	14.74

ATOM	4726	CB	PHE	697	-3.847	12.688	16.307	1.00	14.39
ATOM	4727	CG	PHE	697	-5.272	13.165	16.326	1.00	14.70
ATOM	4728	CD1	PHE	697	-5.973	13.364	15.138	1.00	15.78
ATOM	4729	CD2	PHE	697	-5.913	13.417	17.535	1.00	17.31
ATOM	4730	CE1	PHE	697	-7.296	13.803	15.157	1.00	17.92
ATOM	4731	CE2	PHE	697	-7.235	13.858	17.567	1.00	18.65
ATOM	4732	CZ	PHE	697	-7.928	14.050	16.373	1.00	17.31
ATOM	4733	C	PHE	697	-2.015	11.456	15.206	1.00	16.50
ATOM	4734	O	PHE	697	-1.155	11.972	14.491	1.00	13.69
ATOM	4735	N	GLU	698	-1.747	10.543	16.138	1.00	15.66
ATOM	4736	CA	GLU	698	-0.391	10.082	16.418	1.00	17.86
ATOM	4737	CB	GLU	698	-0.409	9.111	17.603	1.00	21.29
ATOM	4738	CG	GLU	698	0.971	8.622	18.050	1.00	30.05
ATOM	4739	CD	GLU	698	1.631	9.547	19.063	1.00	34.72
ATOM	4740	OE1	GLU	698	1.784	10.753	18.766	1.00	37.42
ATOM	4741	OE2	GLU	698	1.998	9.064	20.165	1.00	40.64
ATOM	4742	C	GLU	698	0.248	9.399	15.213	1.00	16.35
ATOM	4743	O	GLU	698	1.385	9.702	14.836	1.00	16.77
ATOM	4744	N	ASN	699	-0.486	8.473	14.614	1.00	15.59
ATOM	4745	CA	ASN	699	0.033	7.743	13.471	1.00	15.22
ATOM	4746	CB	ASN	699	-0.838	6.506	13.200	1.00	14.54
ATOM	4747	CG	ASN	699	-0.748	5.488	14.328	1.00	17.82
ATOM	4748	OD1	ASN	699	0.320	5.316	14.927	1.00	15.96
ATOM	4749	ND2	ASN	699	-1.857	4.809	14.621	1.00	15.38
ATOM	4750	C	ASN	699	0.159	8.636	12.236	1.00	14.83
ATOM	4751	O	ASN	699	1.134	8.535	11.488	1.00	14.23
ATOM	4752	N	ALA	700	-0.802	9.529	12.026	1.00	14.50
ATOM	4753	CA	ALA	700	-0.710	10.431	10.880	1.00	15.69
ATOM	4754	CB	ALA	700	-1.961	11.288	10.781	1.00	14.56
ATOM	4755	C	ALA	700	0.525	11.316	11.044	1.00	15.36
ATOM	4756	O	ALA	700	1.253	11.555	10.089	1.00	14.90
ATOM	4757	N	ALA	701	0.770	11.793	12.262	1.00	15.92
ATOM	4758	CA	ALA	701	1.920	12.659	12.499	1.00	16.05
ATOM	4759	CB	ALA	701	1.888	13.201	13.920	1.00	15.03
ATOM	4760	C	ALA	701	3.232	11.930	12.244	1.00	15.03
ATOM	4761	O	ALA	701	4.184	12.509	11.730	1.00	16.35
ATOM	4762	N	THR	702	3.289	10.657	12.612	1.00	14.38
ATOM	4763	CA	THR	702	4.503	9.878	12.411	1.00	12.85
ATOM	4764	CB	THR	702	4.323	8.450	12.956	1.00	12.19
ATOM	4765	OG1	THR	702	4.034	8.522	14.354	1.00	12.71
ATOM	4766	CG2	THR	702	5.577	7.625	12.744	1.00	12.48
ATOM	4767	C	THR	702	4.861	9.817	10.928	1.00	15.73
ATOM	4768	O	THR	702	6.015	9.991	10.549	1.00	14.96
ATOM	4769	N	VAL	703	3.855	9.594	10.095	1.00	14.32
ATOM	4770	CA	VAL	703	4.061	9.494	8.665	1.00	17.24
ATOM	4771	CB	VAL	703	2.825	8.862	8.019	1.00	18.94
ATOM	4772	CG1	VAL	703	2.763	9.181	6.557	1.00	24.70
ATOM	4773	CG2	VAL	703	2.866	7.360	8.248	1.00	17.69
ATOM	4774	C	VAL	703	4.373	10.850	8.037	1.00	17.44
ATOM	4775	O	VAL	703	5.207	10.944	7.131	1.00	17.66
ATOM	4776	N	MET	704	3.705	11.895	8.519	1.00	15.75
ATOM	4777	CA	MET	704	3.942	13.246	8.020	1.00	18.71
ATOM	4778	CB	MET	704	2.926	14.231	8.615	1.00	19.63
ATOM	4779	CG	MET	704	1.461	13.959	8.263	1.00	24.43
ATOM	4780	SD	MET	704	1.046	14.259	6.517	1.00	27.09
ATOM	4781	CE	MET	704	1.225	16.072	6.424	1.00	25.27
ATOM	4782	C	MET	704	5.373	13.691	8.379	1.00	17.56
ATOM	4783	O	MET	704	6.075	14.240	7.534	1.00	15.47
ATOM	4784	N	ARG	705	5.810	13.459	9.619	1.00	16.57
ATOM	4785	CA	ARG	705	7.160	13.856	10.007	1.00	17.21
ATOM	4786	CB	ARG	705	7.424	13.597	11.499	1.00	18.12
ATOM	4787	CG	ARG	705	6.566	14.413	12.470	1.00	17.42
ATOM	4788	CD	ARG	705	7.139	14.379	13.887	1.00	18.37
ATOM	4789	NE	ARG	705	6.188	14.923	14.862	1.00	21.69
ATOM	4790	CZ	ARG	705	5.169	14.242	15.377	1.00	21.26
ATOM	4791	NH1	ARG	705	4.960	12.980	15.024	1.00	23.11
ATOM	4792	NH2	ARG	705	4.340	14.830	16.225	1.00	22.67
ATOM	4793	C	ARG	705	8.196	13.104	9.193	1.00	17.07
ATOM	4794	O	ARG	705	9.330	13.568	9.027	1.00	17.74
ATOM	4795	N	ALA	706	7.807	11.942	8.682	1.00	16.11
ATOM	4796	CA	ALA	706	8.709	11.112	7.891	1.00	15.58
ATOM	4797	CB	ALA	706	8.235	9.662	7.921	1.00	14.95
ATOM	4798	C	ALA	706	8.847	11.584	6.445	1.00	15.19
ATOM	4799	O	ALA	706	9.688	11.068	5.709	1.00	15.93
ATOM	4800	N	GLY	707	8.022	12.544	6.033	1.00	14.94
ATOM	4801	CA	GLY	707	8.130	13.053	4.677	1.00	15.89
ATOM	4802	C	GLY	707	6.853	13.203	3.871	1.00	16.03

ATOM	4803	O	GLY	707	6.851	13.882	2.843	1.00	17.90
ATOM	4804	N	ALA	708	5.764	12.591	4.321	1.00	15.28
ATOM	4805	CA	ALA	708	4.500	12.675	3.598	1.00	14.65
ATOM	4806	CB	ALA	708	3.524	11.646	4.140	1.00	11.62
ATOM	4807	C	ALA	708	3.870	14.060	3.677	1.00	15.64
ATOM	4808	O	ALA	708	4.102	14.809	4.628	1.00	14.42
ATOM	4809	N	ASN	709	3.061	14.394	2.675	1.00	16.20
ATOM	4810	CA	ASN	709	2.369	15.682	2.660	1.00	17.11
ATOM	4811	CB	ASN	709	2.482	16.363	1.297	1.00	16.35
ATOM	4812	CG	ASN	709	3.905	16.548	0.855	1.00	16.63
ATOM	4813	OD1	ASN	709	4.693	17.223	1.518	1.00	19.11
ATOM	4814	ND2	ASN	709	4.246	15.951	-0.271	1.00	13.26
ATOM	4815	C	ASN	709	0.890	15.455	2.931	1.00	17.83
ATOM	4816	O	ASN	709	0.163	16.388	3.252	1.00	18.60
ATOM	4817	N	MET	710	0.448	14.212	2.779	1.00	17.20
ATOM	4818	CA	MET	710	-0.955	13.871	2.969	1.00	16.87
ATOM	4819	CB	MET	710	-1.713	14.127	1.654	1.00	18.60
ATOM	4820	CG	MET	710	-3.200	13.816	1.659	1.00	20.01
ATOM	4821	SD	MET	710	-3.944	14.052	-0.001	1.00	21.60
ATOM	4822	CE	MET	710	-4.743	15.673	0.168	1.00	23.23
ATOM	4823	C	MET	710	-1.065	12.405	3.377	1.00	16.40
ATOM	4824	O	MET	710	-0.177	11.604	3.085	1.00	14.55
ATOM	4825	N	VAL	711	-2.152	12.070	4.065	1.00	16.03
ATOM	4826	CA	VAL	711	-2.391	10.712	4.528	1.00	16.57
ATOM	4827	CB	VAL	711	-2.552	10.697	6.065	1.00	19.08
ATOM	4828	CG1	VAL	711	-3.021	9.352	6.515	1.00	23.70
ATOM	4829	CG2	VAL	711	-1.230	11.054	6.730	1.00	17.88
ATOM	4830	C	VAL	711	-3.655	10.132	3.896	1.00	15.86
ATOM	4831	O	VAL	711	-4.635	10.851	3.690	1.00	14.07
ATOM	4832	N	LYS	712	-3.631	8.840	3.570	1.00	13.84
ATOM	4833	CA	LYS	712	-4.798	8.187	2.985	1.00	14.28
ATOM	4834	CB	LYS	712	-4.445	7.501	1.648	1.00	14.48
ATOM	4835	CG	LYS	712	-5.645	6.773	1.006	1.00	13.64
ATOM	4836	CD	LYS	712	-5.475	6.476	-0.491	1.00	14.90
ATOM	4837	CE	LYS	712	-4.471	5.361	-0.770	1.00	14.70
ATOM	4838	NZ	LYS	712	-4.882	4.059	-0.157	1.00	15.92
ATOM	4839	C	LYS	712	-5.371	7.160	3.960	1.00	15.39
ATOM	4840	O	LYS	712	-4.632	6.361	4.532	1.00	13.66
ATOM	4841	N	ILE	713	-6.683	7.203	4.167	1.00	15.54
ATOM	4842	CA	ILE	713	-7.349	6.260	5.060	1.00	16.63
ATOM	4843	CB	ILE	713	-7.800	6.949	6.379	1.00	18.02
ATOM	4844	CG2	ILE	713	-6.584	7.372	7.181	1.00	19.14
ATOM	4845	CG1	ILE	713	-8.667	8.173	6.072	1.00	20.03
ATOM	4846	CD1	ILE	713	-9.130	8.925	7.332	1.00	19.76
ATOM	4847	C	ILE	713	-8.553	5.642	4.351	1.00	18.46
ATOM	4848	O	ILE	713	-9.224	6.306	3.561	1.00	17.02
ATOM	4849	N	GLU	714	-8.809	4.363	4.622	1.00	17.38
ATOM	4850	CA	GLU	714	-9.917	3.642	3.995	1.00	18.87
ATOM	4851	CB	GLU	714	-9.530	2.180	3.735	1.00	18.90
ATOM	4852	CG	GLU	714	-8.183	1.990	3.074	1.00	22.06
ATOM	4853	CD	GLU	714	-7.866	0.530	2.797	1.00	23.62
ATOM	4854	OE1	GLU	714	-8.597	-0.357	3.292	1.00	22.57
ATOM	4855	OE2	GLU	714	-6.876	0.267	2.082	1.00	26.90
ATOM	4856	C	GLU	714	-11.162	3.649	4.867	1.00	18.79
ATOM	4857	O	GLU	714	-11.091	3.389	6.069	1.00	17.88
ATOM	4858	N	GLY	715	-12.304	3.940	4.256	1.00	18.83
ATOM	4859	CA	GLY	715	-13.545	3.956	5.002	1.00	20.89
ATOM	4860	C	GLY	715	-14.476	5.056	4.553	1.00	21.05
ATOM	4861	O	GLY	715	-14.063	5.980	3.855	1.00	22.49
ATOM	4862	N	GLY	716	-15.738	4.953	4.958	1.00	21.69
ATOM	4863	CA	GLY	716	-16.723	5.954	4.585	1.00	20.54
ATOM	4864	C	GLY	716	-17.198	6.833	5.731	1.00	19.68
ATOM	4865	O	GLY	716	-16.396	7.349	6.503	1.00	18.63
ATOM	4866	N	GLU	717	-18.513	7.004	5.828	1.00	20.60
ATOM	4867	CA	GLU	717	-19.143	7.828	6.857	1.00	23.06
ATOM	4868	CB	GLU	717	-20.631	7.498	6.948	1.00	26.89
ATOM	4869	CG	GLU	717	-21.512	8.436	6.154	1.00	35.80
ATOM	4870	CD	GLU	717	-21.970	9.634	6.959	1.00	37.28
ATOM	4871	OE1	GLU	717	-21.125	10.277	7.616	1.00	39.12
ATOM	4872	OE2	GLU	717	-23.183	9.932	6.925	1.00	39.31
ATOM	4873	C	GLU	717	-18.562	7.785	8.257	1.00	21.97
ATOM	4874	O	GLU	717	-18.327	8.830	8.865	1.00	20.61
ATOM	4875	N	TRP	718	-18.340	6.587	8.788	1.00	20.43
ATOM	4876	CA	TRP	718	-17.813	6.487	10.145	1.00	18.97
ATOM	4877	CB	TRP	718	-17.553	5.019	10.527	1.00	16.93
ATOM	4878	CG	TRP	718	-16.338	4.387	9.900	1.00	17.31
ATOM	4879	CD2	TRP	718	-15.033	4.287	10.481	1.00	15.20

ATOM	4880	CE2	TRP	718	-14.213	3.604	9.554	1.00	17.66
ATOM	4881	CE3	TRP	718	-14.475	4.707	11.698	1.00	16.72
ATOM	4882	CD1	TRP	718	-16.260	3.780	8.677	1.00	16.47
ATOM	4883	NE1	TRP	718	-14.986	3.305	8.462	1.00	17.35
ATOM	4884	CZ2	TRP	718	-12.863	3.332	9.804	1.00	17.75
ATOM	4885	CZ3	TRP	718	-13.133	4.436	11.947	1.00	18.17
ATOM	4886	CH2	TRP	718	-12.342	3.753	11.001	1.00	18.73
ATOM	4887	C	TRP	718	-16.554	7.318	10.372	1.00	17.36
ATOM	4888	O	TRP	718	-16.263	7.697	11.504	1.00	16.96
ATOM	4889	N	LEU	719	-15.829	7.624	9.295	1.00	17.61
ATOM	4890	CA	LEU	719	-14.587	8.398	9.392	1.00	16.01
ATOM	4891	CB	LEU	719	-13.634	7.998	8.264	1.00	19.58
ATOM	4892	CG	LEU	719	-12.805	6.729	8.475	1.00	20.53
ATOM	4893	CD1	LEU	719	-12.035	6.426	7.205	1.00	20.90
ATOM	4894	CD2	LEU	719	-11.869	6.919	9.657	1.00	21.41
ATOM	4895	C	LEU	719	-14.722	9.918	9.385	1.00	16.42
ATOM	4896	O	LEU	719	-13.726	10.625	9.538	1.00	15.51
ATOM	4897	N	VAL	720	-15.938	10.425	9.225	1.00	15.73
ATOM	4898	CA	VAL	720	-16.154	11.869	9.181	1.00	16.54
ATOM	4899	CB	VAL	720	-17.664	12.201	9.174	1.00	16.38
ATOM	4900	CG1	VAL	720	-17.875	13.699	9.349	1.00	16.79
ATOM	4901	CG2	VAL	720	-18.283	11.734	7.867	1.00	18.53
ATOM	4902	C	VAL	720	-15.478	12.644	10.306	1.00	15.87
ATOM	4903	O	VAL	720	-14.713	13.572	10.045	1.00	15.80
ATOM	4904	N	GLU	721	-15.745	12.268	11.552	1.00	15.71
ATOM	4905	CA	GLU	721	-15.133	12.966	12.680	1.00	16.66
ATOM	4906	CB	GLU	721	-15.589	12.346	14.003	1.00	18.48
ATOM	4907	CG	GLU	721	-14.947	12.976	15.227	1.00	22.68
ATOM	4908	CD	GLU	721	-15.367	12.293	16.516	1.00	25.74
ATOM	4909	OE1	GLU	721	-14.966	11.131	16.732	1.00	27.93
ATOM	4910	OE2	GLU	721	-16.107	12.920	17.303	1.00	27.98
ATOM	4911	C	GLU	721	-13.610	12.935	12.606	1.00	15.34
ATOM	4912	O	GLU	721	-12.951	13.942	12.857	1.00	14.72
ATOM	4913	N	THR	722	-13.055	11.772	12.274	1.00	14.80
ATOM	4914	CA	THR	722	-11.608	11.624	12.175	1.00	14.47
ATOM	4915	CB	THR	722	-11.213	10.164	11.860	1.00	16.94
ATOM	4916	OG1	THR	722	-11.580	9.322	12.964	1.00	19.05
ATOM	4917	CG2	THR	722	-9.710	10.057	11.628	1.00	15.42
ATOM	4918	C	THR	722	-11.034	12.536	11.099	1.00	15.01
ATOM	4919	O	THR	722	-10.001	13.167	11.299	1.00	14.67
ATOM	4920	N	VAL	723	-11.703	12.606	9.954	1.00	16.05
ATOM	4921	CA	VAL	723	-11.233	13.466	8.867	1.00	15.71
ATOM	4922	CB	VAL	723	-12.058	13.236	7.587	1.00	15.17
ATOM	4923	CG1	VAL	723	-11.612	14.206	6.486	1.00	14.07
ATOM	4924	CG2	VAL	723	-11.880	11.807	7.122	1.00	15.82
ATOM	4925	C	VAL	723	-11.307	14.943	9.268	1.00	16.42
ATOM	4926	O	VAL	723	-10.353	15.694	9.079	1.00	16.04
ATOM	4927	N	GLN	724	-12.437	15.354	9.831	1.00	18.63
ATOM	4928	CA	GLN	724	-12.599	16.743	10.241	1.00	19.28
ATOM	4929	CB	GLN	724	-13.980	16.955	10.869	1.00	22.80
ATOM	4930	CG	GLN	724	-15.145	16.539	9.983	1.00	27.70
ATOM	4931	CD	GLN	724	-16.488	16.695	10.675	1.00	30.60
ATOM	4932	OE1	GLN	724	-16.669	16.241	11.806	1.00	32.97
ATOM	4933	NE2	GLN	724	-17.440	17.328	9.996	1.00	32.67
ATOM	4934	C	GLN	724	-11.513	17.132	11.241	1.00	19.06
ATOM	4935	O	GLN	724	-10.880	18.180	11.107	1.00	16.76
ATOM	4936	N	MET	725	-11.288	16.283	12.239	1.00	15.76
ATOM	4937	CA	MET	725	-10.280	16.576	13.254	1.00	15.65
ATOM	4938	CB	MET	725	-10.440	15.634	14.445	1.00	14.12
ATOM	4939	CG	MET	725	-11.733	15.858	15.188	1.00	17.99
ATOM	4940	SD	MET	725	-11.866	14.852	16.672	1.00	21.90
ATOM	4941	CE	MET	725	-10.847	15.827	17.760	1.00	19.31
ATOM	4942	C	MET	725	-8.849	16.537	12.744	1.00	14.34
ATOM	4943	O	MET	725	-8.018	17.336	13.171	1.00	14.82
ATOM	4944	N	LEU	726	-8.553	15.615	11.834	1.00	13.91
ATOM	4945	CA	LEU	726	-7.207	15.540	11.292	1.00	15.00
ATOM	4946	CB	LEU	726	-7.067	14.333	10.366	1.00	13.52
ATOM	4947	CG	LEU	726	-6.658	13.016	11.034	1.00	15.57
ATOM	4948	CD1	LEU	726	-6.916	11.860	10.087	1.00	15.92
ATOM	4949	CD2	LEU	726	-5.205	13.077	11.443	1.00	15.18
ATOM	4950	C	LEU	726	-6.873	16.819	10.526	1.00	16.85
ATOM	4951	O	LEU	726	-5.783	17.376	10.664	1.00	16.74
ATOM	4952	N	THR	727	-7.822	17.275	9.716	1.00	17.73
ATOM	4953	CA	THR	727	-7.640	18.482	8.909	1.00	22.25
ATOM	4954	CB	THR	727	-8.885	18.755	8.050	1.00	23.64
ATOM	4955	OG1	THR	727	-9.135	17.618	7.207	1.00	25.71
ATOM	4956	CG2	THR	727	-8.669	19.989	7.171	1.00	26.68

ATOM	4957	C	THR	727	-7.332	19.719	9.747	1.00	22.81
ATOM	4958	O	THR	727	-6.363	20.442	9.473	1.00	22.47
ATOM	4959	N	GLU	728	-8.143	19.968	10.769	1.00	23.34
ATOM	4960	CA	GLU	728	-7.903	21.131	11.621	1.00	25.65
ATOM	4961	CB	GLU	728	-9.052	21.331	12.623	1.00	28.30
ATOM	4962	CG	GLU	728	-9.655	20.064	13.186	1.00	30.71
ATOM	4963	CD	GLU	728	-10.802	20.348	14.159	1.00	33.29
ATOM	4964	OE1	GLU	728	-11.541	21.333	13.952	1.00	35.04
ATOM	4965	OE2	GLU	728	-10.979	19.579	15.124	1.00	32.42
ATOM	4966	C	GLU	728	-6.570	21.013	12.353	1.00	24.86
ATOM	4967	O	GLU	728	-6.069	21.993	12.898	1.00	25.47
ATOM	4968	N	ARG	729	-5.986	19.816	12.353	1.00	24.34
ATOM	4969	CA	ARG	729	-4.700	19.612	13.010	1.00	22.72
ATOM	4970	CB	ARG	729	-4.757	18.372	13.907	1.00	20.17
ATOM	4971	CG	ARG	729	-5.646	18.597	15.121	1.00	18.27
ATOM	4972	CD	ARG	729	-5.986	17.326	15.876	1.00	16.32
ATOM	4973	NE	ARG	729	-6.862	17.615	17.011	1.00	17.63
ATOM	4974	CZ	ARG	729	-8.095	18.109	16.911	1.00	19.57
ATOM	4975	NH1	ARG	729	-8.621	18.374	15.725	1.00	20.07
ATOM	4976	NH2	ARG	729	-8.808	18.350	18.003	1.00	20.63
ATOM	4977	C	ARG	729	-3.554	19.524	12.004	1.00	22.25
ATOM	4978	O	ARG	729	-2.546	18.855	12.232	1.00	21.75
ATOM	4979	N	ALA	730	-3.737	20.211	10.880	1.00	22.50
ATOM	4980	CA	ALA	730	-2.732	20.296	9.825	1.00	21.57
ATOM	4981	CB	ALA	730	-1.419	20.801	10.417	1.00	20.27
ATOM	4982	C	ALA	730	-2.472	19.044	9.008	1.00	19.61
ATOM	4983	O	ALA	730	-1.474	18.978	8.301	1.00	18.88
ATOM	4984	N	VAL	731	-3.356	18.057	9.083	1.00	17.78
ATOM	4985	CA	VAL	731	-3.136	16.846	8.308	1.00	17.66
ATOM	4986	CB	VAL	731	-3.204	15.596	9.205	1.00	17.57
ATOM	4987	CG1	VAL	731	-2.985	14.339	8.363	1.00	16.76
ATOM	4988	CG2	VAL	731	-2.138	15.688	10.296	1.00	18.90
ATOM	4989	C	VAL	731	-4.114	16.673	7.153	1.00	17.88
ATOM	4990	O	VAL	731	-5.283	16.373	7.365	1.00	17.43
ATOM	4991	N	PRO	732	-3.652	16.892	5.912	1.00	17.50
ATOM	4992	CD	PRO	732	-2.351	17.419	5.475	1.00	19.31
ATOM	4993	CA	PRO	732	-4.554	16.727	4.773	1.00	18.43
ATOM	4994	CB	PRO	732	-3.771	17.325	3.607	1.00	19.15
ATOM	4995	CG	PRO	732	-2.359	17.103	4.002	1.00	23.17
ATOM	4996	C	PRO	732	-4.820	15.248	4.606	1.00	16.61
ATOM	4997	O	PRO	732	-3.927	14.415	4.797	1.00	15.91
ATOM	4998	N	VAL	733	-6.056	14.925	4.257	1.00	15.66
ATOM	4999	CA	VAL	733	-6.466	13.538	4.101	1.00	16.50
ATOM	5000	CB	VAL	733	-7.543	13.184	5.144	1.00	16.63
ATOM	5001	CG1	VAL	733	-7.868	11.690	5.069	1.00	21.58
ATOM	5002	CG2	VAL	733	-7.070	13.588	6.541	1.00	17.55
ATOM	5003	C	VAL	733	-7.038	13.185	2.737	1.00	16.46
ATOM	5004	O	VAL	733	-7.803	13.951	2.160	1.00	16.24
ATOM	5005	N	CYS	734	-6.668	12.010	2.242	1.00	13.15
ATOM	5006	CA	CYS	734	-7.184	11.490	0.983	1.00	13.80
ATOM	5007	CB	CYS	734	-6.051	10.957	0.120	1.00	11.02
ATOM	5008	SG	CYS	734	-6.600	10.069	-1.355	1.00	15.01
ATOM	5009	C	CYS	734	-8.075	10.324	1.397	1.00	14.24
ATOM	5010	O	CYS	734	-7.641	9.453	2.150	1.00	16.01
ATOM	5011	N	GLY	735	-9.314	10.323	0.921	1.00	12.03
ATOM	5012	CA	GLY	735	-10.229	9.250	1.246	1.00	13.47
ATOM	5013	C	GLY	735	-9.985	8.069	0.322	1.00	14.63
ATOM	5014	O	GLY	735	-9.214	8.174	-0.630	1.00	15.25
ATOM	5015	N	HIS	736	-10.647	6.946	0.593	1.00	14.52
ATOM	5016	CA	HIS	736	-10.484	5.736	-0.216	1.00	14.30
ATOM	5017	CB	HIS	736	-9.269	4.956	0.311	1.00	15.08
ATOM	5018	CG	HIS	736	-8.839	3.797	-0.542	1.00	16.75
ATOM	5019	CD2	HIS	736	-9.519	3.010	-1.411	1.00	17.45
ATOM	5020	ND1	HIS	736	-7.559	3.287	-0.488	1.00	16.99
ATOM	5021	CE1	HIS	736	-7.469	2.236	-1.282	1.00	18.58
ATOM	5022	NE2	HIS	736	-8.645	2.045	-1.854	1.00	16.34
ATOM	5023	C	HIS	736	-11.768	4.919	-0.089	1.00	14.46
ATOM	5024	O	HIS	736	-12.096	4.441	1.000	1.00	14.94
ATOM	5025	N	LEU	737	-12.497	4.777	-1.198	1.00	16.18
ATOM	5026	CA	LEU	737	-13.763	4.033	-1.215	1.00	17.93
ATOM	5027	CB	LEU	737	-14.946	4.992	-1.415	1.00	16.80
ATOM	5028	CG	LEU	737	-15.210	6.030	-0.320	1.00	13.20
ATOM	5029	CD1	LEU	737	-16.249	7.044	-0.807	1.00	13.79
ATOM	5030	CD2	LEU	737	-15.695	5.326	0.939	1.00	15.41
ATOM	5031	C	LEU	737	-13.776	2.993	-2.323	1.00	18.17
ATOM	5032	O	LEU	737	-12.963	3.040	-3.245	1.00	16.22
ATOM	5033	N	GLY	738	-14.715	2.060	-2.223	1.00	19.98

ATOM	5034	CA	GLY	738	-14.822	1.006	-3.209	1.00	22.29
ATOM	5035	C	GLY	738	-14.154	-0.215	-2.623	1.00	23.99
ATOM	5036	O	GLY	738	-14.432	-0.588	-1.487	1.00	23.25
ATOM	5037	N	LEU	739	-13.257	-0.822	-3.390	1.00	25.38
ATOM	5038	CA	LEU	739	-12.537	-1.999	-2.941	1.00	25.53
ATOM	5039	CB	LEU	739	-11.955	-2.731	-4.152	1.00	26.77
ATOM	5040	CG	LEU	739	-11.686	-4.230	-4.032	1.00	28.57
ATOM	5041	CD1	LEU	739	-10.971	-4.722	-5.291	1.00	29.59
ATOM	5042	CD2	LEU	739	-10.849	-4.508	-2.804	1.00	27.92
ATOM	5043	C	LEU	739	-11.413	-1.560	-1.998	1.00	26.90
ATOM	5044	O	LEU	739	-10.331	-1.173	-2.443	1.00	27.05
ATOM	5045	N	THR	740	-11.686	-1.605	-0.697	1.00	25.51
ATOM	5046	CA	THR	740	-10.708	-1.226	0.319	1.00	26.30
ATOM	5047	CB	THR	740	-11.399	-0.547	1.514	1.00	25.07
ATOM	5048	OG1	THR	740	-12.585	-1.272	1.852	1.00	26.66
ATOM	5049	CG2	THR	740	-11.783	0.886	1.170	1.00	28.04
ATOM	5050	C	THR	740	-9.986	-2.487	0.794	1.00	25.33
ATOM	5051	O	THR	740	-10.522	-3.252	1.594	1.00	26.61
ATOM	5052	N	PRO	741	-8.748	-2.704	0.312	1.00	25.06
ATOM	5053	CD	PRO	741	-8.001	-1.737	-0.510	1.00	26.23
ATOM	5054	CA	PRO	741	-7.909	-3.862	0.641	1.00	22.16
ATOM	5055	CB	PRO	741	-6.584	-3.542	-0.060	1.00	25.15
ATOM	5056	CG	PRO	741	-6.588	-2.048	-0.144	1.00	28.32
ATOM	5057	C	PRO	741	-7.736	-4.223	2.111	1.00	20.97
ATOM	5058	O	PRO	741	-7.560	-5.397	2.441	1.00	20.75
ATOM	5059	N	GLN	742	-7.783	-3.241	3.003	1.00	18.98
ATOM	5060	CA	GLN	742	-7.637	-3.556	4.425	1.00	18.22
ATOM	5061	CB	GLN	742	-7.516	-2.273	5.246	1.00	18.22
ATOM	5062	CG	GLN	742	-6.108	-1.698	5.237	1.00	19.20
ATOM	5063	CD	GLN	742	-6.037	-0.295	5.799	1.00	21.99
ATOM	5064	OE1	GLN	742	-6.773	0.056	6.722	1.00	23.77
ATOM	5065	NE2	GLN	742	-5.130	0.513	5.258	1.00	19.08
ATOM	5066	C	GLN	742	-8.813	-4.398	4.916	1.00	17.75
ATOM	5067	O	GLN	742	-8.659	-5.212	5.826	1.00	17.97
ATOM	5068	N	SER	743	-9.976	-4.209	4.296	1.00	18.05
ATOM	5069	CA	SER	743	-11.171	-4.950	4.673	1.00	17.66
ATOM	5070	CB	SER	743	-12.412	-4.063	4.535	1.00	19.22
ATOM	5071	OG	SER	743	-12.368	-2.992	5.473	1.00	19.51
ATOM	5072	C	SER	743	-11.347	-6.222	3.849	1.00	18.63
ATOM	5073	O	SER	743	-12.456	-6.742	3.725	1.00	19.29
ATOM	5074	N	VAL	744	-10.252	-6.733	3.291	1.00	17.52
ATOM	5075	CA	VAL	744	-10.320	-7.949	2.483	1.00	18.17
ATOM	5076	CB	VAL	744	-8.900	-8.422	2.066	1.00	20.91
ATOM	5077	CG1	VAL	744	-8.072	-8.777	3.294	1.00	20.41
ATOM	5078	CG2	VAL	744	-9.004	-9.617	1.126	1.00	21.66
ATOM	5079	C	VAL	744	-11.061	-9.087	3.206	1.00	18.57
ATOM	5080	O	VAL	744	-11.873	-9.786	2.594	1.00	17.85
ATOM	5081	N	ASN	745	-10.801	-9.267	4.501	1.00	18.34
ATOM	5082	CA	ASN	745	-11.451	-10.337	5.256	1.00	18.99
ATOM	5083	CB	ASN	745	-10.783	-10.501	6.624	1.00	18.10
ATOM	5084	CG	ASN	745	-9.306	-10.825	6.505	1.00	18.24
ATOM	5085	OD1	ASN	745	-8.931	-11.911	6.055	1.00	16.42
ATOM	5086	ND2	ASN	745	-8.462	-9.882	6.890	1.00	16.58
ATOM	5087	C	ASN	745	-12.947	-10.100	5.426	1.00	20.36
ATOM	5088	O	ASN	745	-13.718	-11.046	5.590	1.00	19.24
ATOM	5089	N	ILE	746	-13.352	-8.835	5.385	1.00	21.75
ATOM	5090	CA	ILE	746	-14.758	-8.474	5.512	1.00	24.03
ATOM	5091	CB	ILE	746	-14.928	-6.955	5.722	1.00	25.51
ATOM	5092	CG2	ILE	746	-16.393	-6.570	5.577	1.00	27.38
ATOM	5093	CG1	ILE	746	-14.406	-6.553	7.103	1.00	25.99
ATOM	5094	CD1	ILE	746	-15.274	-7.038	8.241	1.00	23.57
ATOM	5095	C	ILE	746	-15.481	-8.866	4.233	1.00	25.01
ATOM	5096	O	ILE	746	-16.510	-9.537	4.274	1.00	24.42
ATOM	5097	N	PHE	747	-14.927	-8.450	3.098	1.00	26.24
ATOM	5098	CA	PHE	747	-15.521	-8.743	1.796	1.00	27.97
ATOM	5099	CB	PHE	747	-14.900	-7.859	0.709	1.00	30.22
ATOM	5100	CG	PHE	747	-14.863	-6.396	1.056	1.00	33.12
ATOM	5101	CD1	PHE	747	-16.006	-5.739	1.504	1.00	34.45
ATOM	5102	CD2	PHE	747	-13.680	-5.672	0.924	1.00	34.85
ATOM	5103	CE1	PHE	747	-15.970	-4.380	1.819	1.00	35.58
ATOM	5104	CE2	PHE	747	-13.631	-4.313	1.235	1.00	35.40
ATOM	5105	CZ	PHE	747	-14.779	-3.668	1.683	1.00	35.63
ATOM	5106	C	PHE	747	-15.323	-10.203	1.412	1.00	29.09
ATOM	5107	O	PHE	747	-16.061	-10.742	0.587	1.00	28.25
ATOM	5108	N	GLY	748	-14.317	-10.837	2.006	1.00	29.00
ATOM	5109	CA	GLY	748	-14.042	-12.229	1.698	1.00	29.92
ATOM	5110	C	GLY	748	-13.185	-12.347	0.453	1.00	30.99

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ATOM   5111  O    GLY  748    -13.228 -13.354  -0.253  1.00 33.17
ATOM   5112  N    GLY  749    -12.400 -11.309   0.184  1.00 30.50
ATOM   5113  CA   GLY  749    -11.539 -11.309  -0.985  1.00 31.40
ATOM   5114  C    GLY  749    -11.590  -9.973  -1.705  1.00 33.02
ATOM   5115  O    GLY  749    -12.279  -9.052  -1.269  1.00 31.79
ATOM   5116  N    TYR  750    -10.857  -9.862  -2.807  1.00 33.78
ATOM   5117  CA   TYR  750    -10.839  -8.626  -3.574  1.00 35.38
ATOM   5118  CB   TYR  750     -9.440  -8.377  -4.133  1.00 36.26
ATOM   5119  CG   TYR  750     -8.361  -8.445  -3.076  1.00 38.04
ATOM   5120  CD1  TYR  750     -7.861  -9.674  -2.639  1.00 39.14
ATOM   5121  CE1  TYR  750     -6.886  -9.742  -1.644  1.00 39.39
ATOM   5122  CD2  TYR  750     -7.858  -7.283  -2.490  1.00 38.52
ATOM   5123  CE2  TYR  750     -6.886  -7.339  -1.493  1.00 39.18
ATOM   5124  CZ   TYR  750     -6.404  -8.569  -1.077  1.00 39.42
ATOM   5125  OH   TYR  750     -5.441  -8.626  -0.095  1.00 39.23
ATOM   5126  C    TYR  750    -11.856  -8.715  -4.705  1.00 35.70
ATOM   5127  O    TYR  750    -11.591  -9.304  -5.753  1.00 36.41
ATOM   5128  N    LYS  751    -13.025  -8.127  -4.480  1.00 35.48
ATOM   5129  CA   LYS  751    -14.098  -8.156  -5.463  1.00 36.67
ATOM   5130  CB   LYS  751    -15.255  -8.989  -4.911  1.00 38.25
ATOM   5131  CG   LYS  751    -14.811 -10.343  -4.361  1.00 40.62
ATOM   5132  CD   LYS  751    -15.870 -10.976  -3.466  1.00 42.04
ATOM   5133  CE   LYS  751    -15.344 -12.243  -2.802  1.00 42.02
ATOM   5134  NZ   LYS  751    -16.334 -12.839  -1.854  1.00 42.38
ATOM   5135  C    LYS  751    -14.569  -6.741  -5.783  1.00 36.24
ATOM   5136  O    LYS  751    -14.371  -5.819  -4.993  1.00 36.25
ATOM   5137  N    VAL  752    -15.194  -6.573  -6.943  1.00 36.26
ATOM   5138  CA   VAL  752    -15.687  -5.264  -7.357  1.00 36.20
ATOM   5139  CB   VAL  752    -16.196  -5.296  -8.816  1.00 36.16
ATOM   5140  CG1  VAL  752    -16.794  -3.948  -9.191  1.00 36.40
ATOM   5141  CG2  VAL  752    -15.057  -5.641  -9.753  1.00 35.98
ATOM   5142  C    VAL  752    -16.826  -4.784  -6.461  1.00 36.45
ATOM   5143  O    VAL  752    -17.758  -5.533  -6.177  1.00 36.56
ATOM   5144  N    GLN  753    -16.740  -3.533  -6.018  1.00 36.02
ATOM   5145  CA   GLN  753    -17.772  -2.943  -5.169  1.00 36.40
ATOM   5146  CB   GLN  753    -17.156  -2.319  -3.915  1.00 37.30
ATOM   5147  CG   GLN  753    -17.031  -3.264  -2.730  1.00 42.36
ATOM   5148  CD   GLN  753    -15.996  -4.345  -2.946  1.00 44.63
ATOM   5149  OE1  GLN  753    -14.816  -4.055  -3.155  1.00 46.92
ATOM   5150  NE2  GLN  753    -16.428  -5.600  -2.889  1.00 44.11
ATOM   5151  C    GLN  753    -18.540  -1.875  -5.937  1.00 35.82
ATOM   5152  O    GLN  753    -18.138  -1.474  -7.028  1.00 34.76
ATOM   5153  N    GLY  754    -19.645  -1.417  -5.361  1.00 36.54
ATOM   5154  CA   GLY  754    -20.446  -0.397  -6.015  1.00 37.86
ATOM   5155  C    GLY  754    -21.571  -0.979  -6.848  1.00 38.80
ATOM   5156  O    GLY  754    -22.558  -0.301  -7.136  1.00 38.37
ATOM   5157  N    ARG  755    -21.413  -2.240  -7.237  1.00 40.53
ATOM   5158  CA   ARG  755    -22.405  -2.948  -8.037  1.00 42.45
ATOM   5159  CB   ARG  755    -22.018  -4.428  -8.145  1.00 43.43
ATOM   5160  CG   ARG  755    -20.750  -4.711  -8.951  1.00 44.60
ATOM   5161  CD   ARG  755    -21.069  -4.927 -10.423  1.00 44.87
ATOM   5162  NE   ARG  755    -19.883  -5.181 -11.242  1.00 44.38
ATOM   5163  CZ   ARG  755    -19.041  -6.196 -11.066  1.00 45.22
ATOM   5164  NH1  ARG  755    -19.240  -7.072 -10.090  1.00 45.18
ATOM   5165  NH2  ARG  755    -18.001  -6.343 -11.876  1.00 44.29
ATOM   5166  C    ARG  755    -23.788  -2.826  -7.399  1.00 42.83
ATOM   5167  O    ARG  755    -23.990  -3.237  -6.257  1.00 43.19
ATOM   5168  N    GLY  756    -24.734  -2.257  -8.139  1.00 43.66
ATOM   5169  CA   GLY  756    -26.079  -2.103  -7.616  1.00 44.45
ATOM   5170  C    GLY  756    -26.404  -0.696  -7.154  1.00 45.42
ATOM   5171  O    GLY  756    -25.510   0.087  -6.827  1.00 45.05
ATOM   5172  N    ASP  757    -27.693  -0.375  -7.123  1.00 45.36
ATOM   5173  CA   ASP  757    -28.151   0.944  -6.704  1.00 45.65
ATOM   5174  CB   ASP  757    -29.642   1.095  -7.011  1.00 48.39
ATOM   5175  CG   ASP  757    -29.954   0.882  -8.477  1.00 50.42
ATOM   5176  OD1  ASP  757    -29.426   1.648  -9.312  1.00 51.37
ATOM   5177  OD2  ASP  757    -30.725  -0.051  -8.795  1.00 51.94
ATOM   5178  C    ASP  757    -27.898   1.188  -5.219  1.00 43.87
ATOM   5179  O    ASP  757    -27.445   2.264  -4.827  1.00 43.00
ATOM   5180  N    GLU  758    -28.193   0.187  -4.396  1.00 42.25
ATOM   5181  CA   GLU  758    -27.988   0.303  -2.956  1.00 41.44
ATOM   5182  CB   GLU  758    -28.338  -1.013  -2.260  1.00 43.32
ATOM   5183  CG   GLU  758    -28.241  -0.945  -0.744  1.00 47.39
ATOM   5184  CD   GLU  758    -27.797  -2.259  -0.123  1.00 49.85
ATOM   5185  OE1  GLU  758    -28.446  -3.298  -0.389  1.00 50.43
ATOM   5186  OE2  GLU  758    -26.796  -2.248   0.632  1.00 50.64
ATOM   5187  C    GLU  758    -26.532   0.653  -2.653  1.00 39.44
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ATOM	5188	O	GLU	758	-26.242	1.628	-1.956	1.00	37.55
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ATOM	5191	CB	ALA	759	-23.420	-1.141	-3.568	1.00	35.45
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ATOM	5194	N	GLY	760	-24.182	1.541	-4.873	1.00	31.34
ATOM	5195	CA	GLY	760	-23.819	2.735	-5.610	1.00	29.95
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ATOM	5201	CG	ASP	761	-28.193	5.146	-4.676	1.00	29.37
ATOM	5202	OD1	ASP	761	-27.664	5.376	-5.782	1.00	29.25
ATOM	5203	OD2	ASP	761	-29.400	4.845	-4.556	1.00	31.42
ATOM	5204	C	ASP	761	-25.070	5.494	-2.410	1.00	28.23
ATOM	5205	O	ASP	761	-24.802	6.612	-1.960	1.00	26.71
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ATOM	5208	CB	GLN	762	-23.858	2.988	0.040	1.00	30.23
ATOM	5209	CG	GLN	762	-23.020	2.931	1.305	1.00	32.27
ATOM	5210	CD	GLN	762	-23.535	3.860	2.378	1.00	33.99
ATOM	5211	OE1	GLN	762	-24.663	3.718	2.852	1.00	36.79
ATOM	5212	NE2	GLN	762	-22.712	4.825	2.767	1.00	35.03
ATOM	5213	C	GLN	762	-22.571	4.973	-0.754	1.00	26.19
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ATOM	5215	N	LEU	763	-21.917	4.578	-1.842	1.00	25.52
ATOM	5216	CA	LEU	763	-20.575	5.078	-2.135	1.00	25.74
ATOM	5217	CB	LEU	763	-19.971	4.340	-3.337	1.00	28.01
ATOM	5218	CG	LEU	763	-19.364	2.960	-3.070	1.00	30.99
ATOM	5219	CD1	LEU	763	-18.850	2.357	-4.373	1.00	31.68
ATOM	5220	CD2	LEU	763	-18.224	3.087	-2.071	1.00	30.71
ATOM	5221	C	LEU	763	-20.602	6.576	-2.416	1.00	24.34
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ATOM	5223	N	LEU	764	-21.616	7.013	-3.154	1.00	24.14
ATOM	5224	CA	LEU	764	-21.761	8.424	-3.488	1.00	24.45
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ATOM	5228	CD2	LEU	764	-22.323	10.988	-4.906	1.00	26.33
ATOM	5229	C	LEU	764	-21.926	9.216	-2.192	1.00	22.36
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ATOM	5233	CB	SER	765	-24.134	8.676	0.745	1.00	21.69
ATOM	5234	OG	SER	765	-24.403	9.355	1.955	1.00	24.43
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ATOM	5236	O	SER	765	-21.459	10.527	1.337	1.00	18.30
ATOM	5237	N	ASP	766	-21.050	8.373	0.832	1.00	19.16
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ATOM	5239	CB	ASP	766	-19.213	6.917	1.623	1.00	19.61
ATOM	5240	CG	ASP	766	-19.907	6.011	2.643	1.00	23.80
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ATOM	5242	OD2	ASP	766	-19.863	4.774	2.458	1.00	24.88
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ATOM	5252	CB	LEU	768	-21.150	13.617	-0.796	1.00	19.27
ATOM	5253	CG	LEU	768	-21.490	13.710	-2.291	1.00	19.38
ATOM	5254	CD1	LEU	768	-22.991	13.530	-2.498	1.00	18.38
ATOM	5255	CD2	LEU	768	-21.036	15.068	-2.823	1.00	21.35
ATOM	5256	C	LEU	768	-19.465	13.744	1.033	1.00	18.16
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ATOM	5258	N	ALA	769	-19.669	12.746	1.886	1.00	15.98
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ATOM	5263	N	LEU	770	-17.146	12.445	2.979	1.00	13.79
ATOM	5264	CA	LEU	770	-15.710	12.577	3.211	1.00	14.28

ATOM	5265	CB	LEU	770	-14.947	11.464	2.482	1.00	13.69
ATOM	5266	CG	LEU	770	-15.159	10.031	3.022	1.00	14.90
ATOM	5267	CD1	LEU	770	-14.652	8.989	2.028	1.00	14.19
ATOM	5268	CD2	LEU	770	-14.439	9.898	4.346	1.00	14.20
ATOM	5269	C	LEU	770	-15.250	13.940	2.713	1.00	14.23
ATOM	5270	O	LEU	770	-14.387	14.585	3.319	1.00	15.29
ATOM	5271	N	GLU	771	-15.826	14.385	1.601	1.00	15.62
ATOM	5272	CA	GLU	771	-15.457	15.685	1.049	1.00	14.95
ATOM	5273	CB	GLU	771	-16.126	15.892	-0.311	1.00	13.82
ATOM	5274	CG	GLU	771	-15.885	17.276	-0.887	1.00	14.20
ATOM	5275	CD	GLU	771	-16.600	17.471	-2.201	1.00	16.87
ATOM	5276	OE1	GLU	771	-17.837	17.270	-2.243	1.00	16.35
ATOM	5277	OE2	GLU	771	-15.931	17.824	-3.184	1.00	16.38
ATOM	5278	C	GLU	771	-15.874	16.793	2.015	1.00	15.89
ATOM	5279	O	GLU	771	-15.097	17.714	2.301	1.00	15.83
ATOM	5280	N	ALA	772	-17.104	16.696	2.512	1.00	15.87
ATOM	5281	CA	ALA	772	-17.653	17.677	3.449	1.00	17.16
ATOM	5282	CB	ALA	772	-19.133	17.384	3.695	1.00	16.98
ATOM	5283	C	ALA	772	-16.896	17.678	4.776	1.00	18.66
ATOM	5284	O	ALA	772	-16.855	18.695	5.472	1.00	17.21
ATOM	5285	N	ALA	773	-16.294	16.537	5.115	1.00	18.43
ATOM	5286	CA	ALA	773	-15.536	16.392	6.358	1.00	18.51
ATOM	5287	CB	ALA	773	-15.359	14.909	6.690	1.00	17.94
ATOM	5288	C	ALA	773	-14.170	17.067	6.265	1.00	17.57
ATOM	5289	O	ALA	773	-13.539	17.358	7.284	1.00	19.73
ATOM	5290	N	GLY	774	-13.714	17.309	5.040	1.00	18.75
ATOM	5291	CA	GLY	774	-12.424	17.954	4.853	1.00	16.12
ATOM	5292	C	GLY	774	-11.451	17.251	3.913	1.00	15.01
ATOM	5293	O	GLY	774	-10.395	17.797	3.600	1.00	13.07
ATOM	5294	N	ALA	775	-11.786	16.048	3.451	1.00	15.01
ATOM	5295	CA	ALA	775	-10.893	15.326	2.546	1.00	15.38
ATOM	5296	CB	ALA	775	-11.513	13.990	2.134	1.00	15.63
ATOM	5297	C	ALA	775	-10.610	16.171	1.308	1.00	15.18
ATOM	5298	O	ALA	775	-11.534	16.705	0.708	1.00	14.76
ATOM	5299	N	GLN	776	-9.337	16.270	0.924	1.00	14.50
ATOM	5300	CA	GLN	776	-8.934	17.071	-0.230	1.00	15.43
ATOM	5301	CB	GLN	776	-7.695	17.893	0.129	1.00	15.10
ATOM	5302	CG	GLN	776	-7.928	18.846	1.283	1.00	18.62
ATOM	5303	CD	GLN	776	-6.658	19.513	1.747	1.00	18.59
ATOM	5304	OE1	GLN	776	-6.002	20.221	0.984	1.00	24.99
ATOM	5305	NE2	GLN	776	-6.305	19.298	3.007	1.00	21.94
ATOM	5306	C	GLN	776	-8.657	16.233	-1.474	1.00	15.17
ATOM	5307	O	GLN	776	-8.344	16.765	-2.537	1.00	14.62
ATOM	5308	N	LEU	777	-8.767	14.918	-1.330	1.00	15.85
ATOM	5309	CA	LEU	777	-8.547	13.990	-2.429	1.00	15.20
ATOM	5310	CB	LEU	777	-7.057	13.673	-2.562	1.00	16.16
ATOM	5311	CG	LEU	777	-6.264	14.319	-3.689	1.00	22.07
ATOM	5312	CD1	LEU	777	-4.776	13.947	-3.529	1.00	20.46
ATOM	5313	CD2	LEU	777	-6.792	13.831	-5.042	1.00	23.78
ATOM	5314	C	LEU	777	-9.316	12.710	-2.125	1.00	15.07
ATOM	5315	O	LEU	777	-9.600	12.419	-0.966	1.00	12.13
ATOM	5316	N	LEU	778	-9.654	11.954	-3.163	1.00	13.83
ATOM	5317	CA	LEU	778	-10.375	10.701	-2.979	1.00	14.56
ATOM	5318	CB	LEU	778	-11.891	10.887	-3.176	1.00	14.01
ATOM	5319	CG	LEU	778	-12.722	9.593	-3.192	1.00	14.97
ATOM	5320	CD1	LEU	778	-12.716	8.948	-1.806	1.00	15.87
ATOM	5321	CD2	LEU	778	-14.150	9.893	-3.609	1.00	13.98
ATOM	5322	C	LEU	778	-9.892	9.647	-3.955	1.00	15.86
ATOM	5323	O	LEU	778	-9.731	9.913	-5.150	1.00	16.74
ATOM	5324	N	VAL	779	-9.639	8.450	-3.440	1.00	14.91
ATOM	5325	CA	VAL	779	-9.235	7.348	-4.295	1.00	15.20
ATOM	5326	CB	VAL	779	-8.057	6.528	-3.694	1.00	15.02
ATOM	5327	CG1	VAL	779	-7.850	5.242	-4.509	1.00	14.33
ATOM	5328	CG2	VAL	779	-6.774	7.354	-3.730	1.00	15.87
ATOM	5329	C	VAL	779	-10.465	6.453	-4.416	1.00	15.26
ATOM	5330	O	VAL	779	-11.171	6.222	-3.430	1.00	14.26
ATOM	5331	N	LEU	780	-10.725	5.982	-5.632	1.00	16.87
ATOM	5332	CA	LEU	780	-11.854	5.094	-5.928	1.00	18.23
ATOM	5333	CB	LEU	780	-12.807	5.737	-6.937	1.00	20.90
ATOM	5334	CG	LEU	780	-14.160	6.196	-6.413	1.00	24.41
ATOM	5335	CD1	LEU	780	-15.027	6.667	-7.586	1.00	22.61
ATOM	5336	CD2	LEU	780	-14.841	5.046	-5.677	1.00	24.16
ATOM	5337	C	LEU	780	-11.263	3.841	-6.535	1.00	17.70
ATOM	5338	O	LEU	780	-10.617	3.912	-7.580	1.00	18.28
ATOM	5339	N	GLU	781	-11.485	2.693	-5.895	1.00	17.11
ATOM	5340	CA	GLU	781	-10.913	1.434	-6.386	1.00	18.49
ATOM	5341	CB	GLU	781	-9.972	0.857	-5.314	1.00	19.29

ATOM	5342	CG	GLU	781	-9.242	-0.416	-5.728	1.00	19.49
ATOM	5343	CD	GLU	781	-8.175	-0.831	-4.738	1.00	23.53
ATOM	5344	OE1	GLU	781	-7.901	-0.070	-3.781	1.00	21.13
ATOM	5345	OE2	GLU	781	-7.597	-1.925	-4.921	1.00	25.81
ATOM	5346	C	GLU	781	-11.930	0.370	-6.808	1.00	20.03
ATOM	5347	O	GLU	781	-12.883	0.091	-6.088	1.00	21.13
ATOM	5348	N	CYS	782	-11.701	-0.207	-7.986	1.00	21.54
ATOM	5349	CA	CYS	782	-12.535	-1.260	-8.555	1.00	22.35
ATOM	5350	CB	CYS	782	-12.071	-2.623	-8.037	1.00	22.48
ATOM	5351	SG	CYS	782	-10.365	-2.991	-8.514	1.00	23.47
ATOM	5352	C	CYS	782	-14.024	-1.076	-8.314	1.00	23.36
ATOM	5353	O	CYS	782	-14.639	-1.733	-7.469	1.00	22.95
ATOM	5354	N	VAL	783	-14.586	-0.163	-9.088	1.00	23.52
ATOM	5355	CA	VAL	783	-15.988	0.173	-9.016	1.00	26.91
ATOM	5356	CB	VAL	783	-16.170	1.481	-8.199	1.00	28.96
ATOM	5357	CG1	VAL	783	-15.616	2.665	-8.975	1.00	29.79
ATOM	5358	CG2	VAL	783	-17.622	1.687	-7.843	1.00	32.62
ATOM	5359	C	VAL	783	-16.434	0.360	-10.467	1.00	26.23
ATOM	5360	O	VAL	783	-15.628	0.711	-11.326	1.00	26.43
ATOM	5361	N	PRO	784	-17.711	0.083	-10.770	1.00	26.23
ATOM	5362	CD	PRO	784	-18.792	-0.423	-9.913	1.00	27.16
ATOM	5363	CA	PRO	784	-18.177	0.256	-12.149	1.00	26.47
ATOM	5364	CB	PRO	784	-19.671	-0.087	-12.060	1.00	25.76
ATOM	5365	CG	PRO	784	-20.008	0.120	-10.612	1.00	27.94
ATOM	5366	C	PRO	784	-17.908	1.675	-12.644	1.00	26.66
ATOM	5367	O	PRO	784	-18.053	2.640	-11.893	1.00	27.09
ATOM	5368	N	VAL	785	-17.509	1.788	-13.906	1.00	26.20
ATOM	5369	CA	VAL	785	-17.191	3.075	-14.512	1.00	26.42
ATOM	5370	CB	VAL	785	-16.897	2.922	-16.014	1.00	26.52
ATOM	5371	CG1	VAL	785	-16.455	4.253	-16.602	1.00	27.04
ATOM	5372	CG2	VAL	785	-15.821	1.878	-16.221	1.00	26.53
ATOM	5373	C	VAL	785	-18.287	4.111	-14.343	1.00	26.76
ATOM	5374	O	VAL	785	-18.021	5.244	-13.939	1.00	23.64
ATOM	5375	N	GLU	786	-19.519	3.728	-14.664	1.00	26.86
ATOM	5376	CA	GLU	786	-20.639	4.648	-14.542	1.00	26.47
ATOM	5377	CB	GLU	786	-21.953	3.966	-14.959	1.00	29.51
ATOM	5378	CG	GLU	786	-21.954	2.441	-14.909	1.00	33.26
ATOM	5379	CD	GLU	786	-21.024	1.816	-15.941	1.00	33.35
ATOM	5380	OE1	GLU	786	-21.069	2.234	-17.115	1.00	35.72
ATOM	5381	OE2	GLU	786	-20.257	0.900	-15.578	1.00	36.70
ATOM	5382	C	GLU	786	-20.752	5.203	-13.125	1.00	25.75
ATOM	5383	O	GLU	786	-21.142	6.352	-12.934	1.00	25.18
ATOM	5384	N	LEU	787	-20.400	4.396	-12.130	1.00	25.85
ATOM	5385	CA	LEU	787	-20.470	4.854	-10.749	1.00	24.33
ATOM	5386	CB	LEU	787	-20.375	3.662	-9.797	1.00	27.24
ATOM	5387	CG	LEU	787	-20.739	3.896	-8.330	1.00	29.42
ATOM	5388	CD1	LEU	787	-20.937	2.553	-7.652	1.00	30.34
ATOM	5389	CD2	LEU	787	-19.666	4.691	-7.632	1.00	30.31
ATOM	5390	C	LEU	787	-19.338	5.846	-10.481	1.00	24.18
ATOM	5391	O	LEU	787	-19.519	6.834	-9.764	1.00	21.41
ATOM	5392	N	ALA	788	-18.171	5.579	-11.062	1.00	23.68
ATOM	5393	CA	ALA	788	-17.019	6.456	-10.895	1.00	23.32
ATOM	5394	CB	ALA	788	-15.794	5.843	-11.564	1.00	21.55
ATOM	5395	C	ALA	788	-17.337	7.817	-11.510	1.00	23.99
ATOM	5396	O	ALA	788	-16.890	8.855	-11.020	1.00	23.15
ATOM	5397	N	LYS	789	-18.117	7.808	-12.586	1.00	25.42
ATOM	5398	CA	LYS	789	-18.495	9.050	-13.254	1.00	25.60
ATOM	5399	CB	LYS	789	-19.273	8.758	-14.537	1.00	29.58
ATOM	5400	CG	LYS	789	-18.679	7.660	-15.392	1.00	34.03
ATOM	5401	CD	LYS	789	-19.410	7.537	-16.722	1.00	37.45
ATOM	5402	CE	LYS	789	-18.909	6.342	-17.513	1.00	37.98
ATOM	5403	NZ	LYS	789	-19.397	6.370	-18.912	1.00	39.55
ATOM	5404	C	LYS	789	-19.365	9.883	-12.323	1.00	24.36
ATOM	5405	O	LYS	789	-19.124	11.074	-12.140	1.00	23.55
ATOM	5406	N	ARG	790	-20.380	9.254	-11.737	1.00	23.75
ATOM	5407	CA	ARG	790	-21.275	9.959	-10.824	1.00	23.75
ATOM	5408	CB	ARG	790	-22.320	9.011	-10.229	1.00	26.20
ATOM	5409	CG	ARG	790	-23.400	8.564	-11.192	1.00	31.43
ATOM	5410	CD	ARG	790	-24.747	8.502	-10.483	1.00	34.23
ATOM	5411	NE	ARG	790	-24.766	7.564	-9.362	1.00	33.07
ATOM	5412	CZ	ARG	790	-25.553	7.694	-8.297	1.00	35.30
ATOM	5413	NH1	ARG	790	-26.380	8.725	-8.205	1.00	37.31
ATOM	5414	NH2	ARG	790	-25.525	6.793	-7.323	1.00	35.56
ATOM	5415	C	ARG	790	-20.510	10.612	-9.680	1.00	22.42
ATOM	5416	O	ARG	790	-20.752	11.767	-9.329	1.00	20.30
ATOM	5417	N	ILE	791	-19.584	9.864	-9.098	1.00	20.17
ATOM	5418	CA	ILE	791	-18.811	10.374	-7.979	1.00	18.67

ATOM	5419	CB	ILE	791	-17.999	9.232	-7.310	1.00	18.12
ATOM	5420	CG2	ILE	791	-16.996	9.802	-6.317	1.00	16.97
ATOM	5421	CG1	ILE	791	-18.971	8.276	-6.599	1.00	20.08
ATOM	5422	CD1	ILE	791	-18.299	7.133	-5.849	1.00	23.20
ATOM	5423	C	ILE	791	-17.883	11.504	-8.402	1.00	15.86
ATOM	5424	O	ILE	791	-17.806	12.533	-7.732	1.00	15.97
ATOM	5425	N	THR	792	-17.192	11.315	-9.519	1.00	17.74
ATOM	5426	CA	THR	792	-16.271	12.326	-10.014	1.00	19.29
ATOM	5427	CB	THR	792	-15.511	11.819	-11.242	1.00	19.17
ATOM	5428	OG1	THR	792	-14.779	10.636	-10.890	1.00	17.58
ATOM	5429	CG2	THR	792	-14.539	12.879	-11.737	1.00	18.00
ATOM	5430	C	THR	792	-17.004	13.622	-10.360	1.00	20.60
ATOM	5431	O	THR	792	-16.476	14.712	-10.145	1.00	20.78
ATOM	5432	N	GLU	793	-18.216	13.509	-10.891	1.00	20.13
ATOM	5433	CA	GLU	793	-18.971	14.706	-11.236	1.00	21.99
ATOM	5434	CB	GLU	793	-20.014	14.392	-12.307	1.00	24.27
ATOM	5435	CG	GLU	793	-19.412	13.848	-13.589	1.00	27.80
ATOM	5436	CD	GLU	793	-20.427	13.745	-14.703	1.00	31.99
ATOM	5437	OE1	GLU	793	-21.513	13.160	-14.477	1.00	33.12
ATOM	5438	OE2	GLU	793	-20.135	14.243	-15.808	1.00	34.84
ATOM	5439	C	GLU	793	-19.654	15.337	-10.023	1.00	21.66
ATOM	5440	O	GLU	793	-19.869	16.546	-9.990	1.00	22.52
ATOM	5441	N	ALA	794	-19.990	14.528	-9.023	1.00	20.04
ATOM	5442	CA	ALA	794	-20.648	15.054	-7.832	1.00	19.93
ATOM	5443	CB	ALA	794	-21.394	13.936	-7.102	1.00	21.36
ATOM	5444	C	ALA	794	-19.679	15.739	-6.868	1.00	20.03
ATOM	5445	O	ALA	794	-20.088	16.572	-6.064	1.00	20.59
ATOM	5446	N	LEU	795	-18.399	15.396	-6.940	1.00	19.04
ATOM	5447	CA	LEU	795	-17.424	15.990	-6.034	1.00	17.59
ATOM	5448	CB	LEU	795	-16.488	14.910	-5.483	1.00	20.28
ATOM	5449	CG	LEU	795	-17.098	13.760	-4.674	1.00	23.20
ATOM	5450	CD1	LEU	795	-15.962	12.889	-4.142	1.00	22.33
ATOM	5451	CD2	LEU	795	-17.934	14.285	-3.527	1.00	26.37
ATOM	5452	C	LEU	795	-16.586	17.098	-6.657	1.00	15.79
ATOM	5453	O	LEU	795	-16.268	17.065	-7.846	1.00	16.54
ATOM	5454	N	ALA	796	-16.227	18.082	-5.840	1.00	15.08
ATOM	5455	CA	ALA	796	-15.404	19.185	-6.310	1.00	15.70
ATOM	5456	CB	ALA	796	-15.684	20.435	-5.494	1.00	15.40
ATOM	5457	C	ALA	796	-13.936	18.789	-6.193	1.00	14.51
ATOM	5458	O	ALA	796	-13.108	19.193	-7.008	1.00	13.29
ATOM	5459	N	ILE	797	-13.617	17.989	-5.175	1.00	14.50
ATOM	5460	CA	ILE	797	-12.243	17.546	-4.972	1.00	13.86
ATOM	5461	CB	ILE	797	-12.029	16.916	-3.560	1.00	14.10
ATOM	5462	CG2	ILE	797	-12.315	17.932	-2.488	1.00	13.02
ATOM	5463	CG1	ILE	797	-12.932	15.694	-3.365	1.00	15.07
ATOM	5464	CD1	ILE	797	-12.592	14.909	-2.090	1.00	16.44
ATOM	5465	C	ILE	797	-11.862	16.526	-6.034	1.00	12.69
ATOM	5466	O	ILE	797	-12.720	15.843	-6.595	1.00	14.87
ATOM	5467	N	PRO	798	-10.565	16.419	-6.340	1.00	14.26
ATOM	5468	CD	PRO	798	-9.444	17.299	-5.974	1.00	15.87
ATOM	5469	CA	PRO	798	-10.181	15.446	-7.359	1.00	13.35
ATOM	5470	CB	PRO	798	-8.720	15.796	-7.660	1.00	15.01
ATOM	5471	CG	PRO	798	-8.256	16.532	-6.455	1.00	18.28
ATOM	5472	C	PRO	798	-10.377	14.004	-6.920	1.00	13.85
ATOM	5473	O	PRO	798	-10.202	13.665	-5.745	1.00	12.45
ATOM	5474	N	VAL	799	-10.764	13.169	-7.879	1.00	13.99
ATOM	5475	CA	VAL	799	-10.992	11.750	-7.633	1.00	15.13
ATOM	5476	CB	VAL	799	-12.432	11.349	-8.019	1.00	16.02
ATOM	5477	CG1	VAL	799	-12.605	9.845	-7.864	1.00	14.52
ATOM	5478	CG2	VAL	799	-13.422	12.080	-7.119	1.00	14.06
ATOM	5479	C	VAL	799	-9.994	10.941	-8.439	1.00	14.87
ATOM	5480	O	VAL	799	-9.949	11.029	-9.663	1.00	15.59
ATOM	5481	N	ILE	800	-9.186	10.162	-7.731	1.00	14.30
ATOM	5482	CA	ILE	800	-8.170	9.335	-8.350	1.00	14.45
ATOM	5483	CB	ILE	800	-6.861	9.375	-7.528	1.00	15.69
ATOM	5484	CG2	ILE	800	-5.830	8.414	-8.128	1.00	14.51
ATOM	5485	CG1	ILE	800	-6.315	10.810	-7.524	1.00	15.10
ATOM	5486	CD1	ILE	800	-5.074	11.021	-6.676	1.00	17.30
ATOM	5487	C	ILE	800	-8.691	7.911	-8.429	1.00	14.61
ATOM	5488	O	ILE	800	-9.113	7.334	-7.424	1.00	13.66
ATOM	5489	N	GLY	801	-8.672	7.349	-9.629	1.00	13.09
ATOM	5490	CA	GLY	801	-9.178	6.005	-9.783	1.00	12.12
ATOM	5491	C	GLY	801	-8.151	4.935	-10.061	1.00	13.23
ATOM	5492	O	GLY	801	-7.055	5.200	-10.549	1.00	12.71
ATOM	5493	N	ILE	802	-8.522	3.713	-9.703	1.00	14.81
ATOM	5494	CA	ILE	802	-7.712	2.533	-9.954	1.00	16.00
ATOM	5495	CB	ILE	802	-6.799	2.164	-8.739	1.00	15.76

ATOM	5496	CG2	ILE	802	-7.575	2.202	-7.439	1.00	18.40
ATOM	5497	CG1	ILE	802	-6.172	0.792	-8.967	1.00	20.03
ATOM	5498	CD1	ILE	802	-5.323	0.706	-10.195	1.00	20.86
ATOM	5499	C	ILE	802	-8.773	1.468	-10.223	1.00	15.80
ATOM	5500	O	ILE	802	-9.548	1.112	-9.343	1.00	16.52
ATOM	5501	N	GLY	803	-8.831	1.008	-11.466	1.00	18.14
ATOM	5502	CA	GLY	803	-9.826	0.024	-11.834	1.00	18.81
ATOM	5503	C	GLY	803	-11.211	0.649	-11.819	1.00	19.32
ATOM	5504	O	GLY	803	-12.206	-0.041	-11.600	1.00	20.70
ATOM	5505	N	ALA	804	-11.278	1.957	-12.049	1.00	17.72
ATOM	5506	CA	ALA	804	-12.544	2.676	-12.048	1.00	18.13
ATOM	5507	CB	ALA	804	-12.547	3.719	-10.922	1.00	16.05
ATOM	5508	C	ALA	804	-12.834	3.359	-13.382	1.00	17.22
ATOM	5509	O	ALA	804	-13.727	4.205	-13.478	1.00	19.29
ATOM	5510	N	GLY	805	-12.079	2.999	-14.412	1.00	17.74
ATOM	5511	CA	GLY	805	-12.289	3.595	-15.718	1.00	19.47
ATOM	5512	C	GLY	805	-11.524	4.893	-15.885	1.00	19.16
ATOM	5513	O	GLY	805	-10.832	5.336	-14.964	1.00	19.03
ATOM	5514	N	ASN	806	-11.646	5.509	-17.057	1.00	17.88
ATOM	5515	CA	ASN	806	-10.939	6.760	-17.324	1.00	18.23
ATOM	5516	CB	ASN	806	-10.410	6.784	-18.769	1.00	16.49
ATOM	5517	CG	ASN	806	-11.511	6.953	-19.810	1.00	18.05
ATOM	5518	OD1	ASN	806	-11.225	7.247	-20.972	1.00	19.59
ATOM	5519	ND2	ASN	806	-12.767	6.760	-19.404	1.00	12.05
ATOM	5520	C	ASN	806	-11.774	8.006	-17.062	1.00	18.00
ATOM	5521	O	ASN	806	-11.411	9.091	-17.497	1.00	18.99
ATOM	5522	N	VAL	807	-12.872	7.848	-16.331	1.00	17.63
ATOM	5523	CA	VAL	807	-13.756	8.965	-16.033	1.00	19.39
ATOM	5524	CB	VAL	807	-15.205	8.489	-15.860	1.00	21.52
ATOM	5525	CG1	VAL	807	-16.140	9.685	-15.847	1.00	27.73
ATOM	5526	CG2	VAL	807	-15.578	7.547	-16.990	1.00	24.38
ATOM	5527	C	VAL	807	-13.354	9.738	-14.783	1.00	18.27
ATOM	5528	O	VAL	807	-13.941	10.770	-14.478	1.00	16.18
ATOM	5529	N	THR	808	-12.361	9.237	-14.057	1.00	18.22
ATOM	5530	CA	THR	808	-11.899	9.915	-12.854	1.00	14.60
ATOM	5531	CB	THR	808	-11.203	8.920	-11.885	1.00	16.31
ATOM	5532	OG1	THR	808	-10.153	8.222	-12.567	1.00	14.17
ATOM	5533	CG2	THR	808	-12.215	7.923	-11.346	1.00	12.82
ATOM	5534	C	THR	808	-10.944	11.044	-13.250	1.00	16.13
ATOM	5535	O	THR	808	-10.476	11.103	-14.390	1.00	16.23
ATOM	5536	N	ASP	809	-10.675	11.948	-12.312	1.00	15.76
ATOM	5537	CA	ASP	809	-9.790	13.086	-12.556	1.00	15.32
ATOM	5538	CB	ASP	809	-9.912	14.095	-11.405	1.00	14.96
ATOM	5539	CG	ASP	809	-11.332	14.591	-11.221	1.00	15.54
ATOM	5540	OD1	ASP	809	-11.890	15.153	-12.191	1.00	17.46
ATOM	5541	OD2	ASP	809	-11.897	14.428	-10.126	1.00	17.01
ATOM	5542	C	ASP	809	-8.342	12.633	-12.691	1.00	15.52
ATOM	5543	O	ASP	809	-7.535	13.266	-13.379	1.00	14.60
ATOM	5544	N	GLY	810	-8.021	11.528	-12.031	1.00	15.18
ATOM	5545	CA	GLY	810	-6.673	11.011	-12.089	1.00	15.09
ATOM	5546	C	GLY	810	-6.630	9.501	-12.037	1.00	14.54
ATOM	5547	O	GLY	810	-7.656	8.831	-11.914	1.00	14.65
ATOM	5548	N	GLN	811	-5.424	8.964	-12.115	1.00	14.84
ATOM	5549	CA	GLN	811	-5.242	7.528	-12.093	1.00	14.60
ATOM	5550	CB	GLN	811	-4.929	7.035	-13.506	1.00	15.54
ATOM	5551	CG	GLN	811	-6.026	7.268	-14.523	1.00	16.05
ATOM	5552	CD	GLN	811	-7.254	6.423	-14.248	1.00	14.86
ATOM	5553	OE1	GLN	811	-7.145	5.274	-13.812	1.00	15.67
ATOM	5554	NE2	GLN	811	-8.428	6.982	-14.513	1.00	13.00
ATOM	5555	C	GLN	811	-4.095	7.146	-11.173	1.00	16.44
ATOM	5556	O	GLN	811	-3.179	7.933	-10.940	1.00	12.57
ATOM	5557	N	ILE	812	-4.151	5.932	-10.648	1.00	18.01
ATOM	5558	CA	ILE	812	-3.080	5.448	-9.795	1.00	21.55
ATOM	5559	CB	ILE	812	-3.394	5.680	-8.286	1.00	22.97
ATOM	5560	CG2	ILE	812	-4.477	4.732	-7.810	1.00	24.22
ATOM	5561	CG1	ILE	812	-2.116	5.495	-7.461	1.00	26.66
ATOM	5562	CD1	ILE	812	-2.168	6.141	-6.077	1.00	27.37
ATOM	5563	C	ILE	812	-2.880	3.968	-10.098	1.00	23.39
ATOM	5564	O	ILE	812	-3.781	3.292	-10.599	1.00	22.15
ATOM	5565	N	LEU	813	-1.678	3.478	-9.832	1.00	25.42
ATOM	5566	CA	LEU	813	-1.369	2.081	-10.072	1.00	27.98
ATOM	5567	CB	LEU	813	-1.231	1.814	-11.572	1.00	29.46
ATOM	5568	CG	LEU	813	-2.228	0.842	-12.220	1.00	33.93
ATOM	5569	CD1	LEU	813	-1.759	0.552	-13.636	1.00	36.02
ATOM	5570	CD2	LEU	813	-2.306	-0.460	-11.426	1.00	34.60
ATOM	5571	C	LEU	813	-0.075	1.704	-9.375	1.00	27.36
ATOM	5572	O	LEU	813	0.783	2.558	-9.138	1.00	24.70

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ATOM    5573  N   VAL   814      0.046   0.422  -9.038  1.00 27.73
ATOM    5574  CA  VAL   814      1.238  -0.099  -8.388  1.00 24.77
ATOM    5575  CB  VAL   814      0.992  -1.504  -7.775  1.00 26.98
ATOM    5576  CG1 VAL   814      2.285  -2.045  -7.170  1.00 27.58
ATOM    5577  CG2 VAL   814     -0.088  -1.420  -6.705  1.00 29.29
ATOM    5578  C   VAL   814      2.313  -0.208  -9.456  1.00 21.90
ATOM    5579  O   VAL   814      2.128  -0.851 -10.487  1.00 19.33
ATOM    5580  N   MET   815      3.441   0.438  -9.202  1.00 20.34
ATOM    5581  CA  MET   815      4.546   0.432 -10.142  1.00 18.61
ATOM    5582  CB  MET   815      5.710   1.244  -9.564  1.00 15.22
ATOM    5583  CG  MET   815      6.183   0.786  -8.190  1.00 15.35
ATOM    5584  SD  MET   815      7.964   0.942  -8.143  1.00 16.36
ATOM    5585  CE  MET   815      8.452  -0.581  -8.957  1.00 11.50
ATOM    5586  C   MET   815      5.020  -0.973 -10.521  1.00 17.74
ATOM    5587  O   MET   815      5.483  -1.205 -11.639  1.00 19.67
ATOM    5588  N   HIS   816      4.908  -1.918  -9.597  1.00 17.17
ATOM    5589  CA  HIS   816      5.358  -3.276  -9.870  1.00 17.66
ATOM    5590  CB  HIS   816      5.319  -4.091  -8.570  1.00 16.96
ATOM    5591  CG  HIS   816      6.334  -3.639  -7.567  1.00 16.58
ATOM    5592  CD2 HIS   816      6.312  -2.620  -6.675  1.00 14.97
ATOM    5593  ND1 HIS   816      7.604  -4.173  -7.503  1.00 18.92
ATOM    5594  CE1 HIS   816      8.322  -3.500  -6.622  1.00 15.55
ATOM    5595  NE2 HIS   816      7.561  -2.551  -6.106  1.00 21.47
ATOM    5596  C   HIS   816      4.578  -3.953 -10.994  1.00 20.90
ATOM    5597  O   HIS   816      5.096  -4.844 -11.663  1.00 20.05
ATOM    5598  N   ASP   817      3.340  -3.524 -11.217  1.00 23.00
ATOM    5599  CA  ASP   817      2.526  -4.095 -12.294  1.00 25.53
ATOM    5600  CB  ASP   817      1.041  -4.013 -11.939  1.00 29.00
ATOM    5601  CG  ASP   817      0.689  -4.830 -10.710  1.00 32.54
ATOM    5602  OD1 ASP   817      0.878  -6.062 -10.742  1.00 34.60
ATOM    5603  OD2 ASP   817      0.224  -4.234  -9.716  1.00 34.24
ATOM    5604  C   ASP   817      2.786  -3.341 -13.602  1.00 26.31
ATOM    5605  O   ASP   817      2.743  -3.925 -14.687  1.00 27.79
ATOM    5606  N   ALA   818      3.064  -2.045 -13.489  1.00 27.64
ATOM    5607  CA  ALA   818      3.330  -1.195 -14.651  1.00 27.51
ATOM    5608  CB  ALA   818      3.461   0.262 -14.204  1.00 28.70
ATOM    5609  C   ALA   818      4.573  -1.609 -15.438  1.00 28.22
ATOM    5610  O   ALA   818      4.661  -1.348 -16.640  1.00 27.43
ATOM    5611  N   PHE   819      5.536  -2.242 -14.765  1.00 26.40
ATOM    5612  CA  PHE   819      6.764  -2.676 -15.434  1.00 25.70
ATOM    5613  CB  PHE   819      7.994  -2.133 -14.705  1.00 26.29
ATOM    5614  CG  PHE   819      7.889  -0.677 -14.359  1.00 27.48
ATOM    5615  CD1 PHE   819      7.412   0.237 -15.292  1.00 28.59
ATOM    5616  CD2 PHE   819      8.248  -0.219 -13.094  1.00 28.81
ATOM    5617  CE1 PHE   819      7.289   1.588 -14.975  1.00 29.43
ATOM    5618  CE2 PHE   819      8.131   1.132 -12.763  1.00 29.98
ATOM    5619  CZ  PHE   819      7.648   2.037 -13.707  1.00 30.70
ATOM    5620  C   PHE   819      6.869  -4.191 -15.551  1.00 25.12
ATOM    5621  O   PHE   819      7.935  -4.733 -15.846  1.00 24.68
ATOM    5622  N   GLY   820      5.753  -4.872 -15.323  1.00 24.44
ATOM    5623  CA  GLY   820      5.738  -6.320 -15.419  1.00 24.57
ATOM    5624  C   GLY   820      6.655  -7.010 -14.429  1.00 25.69
ATOM    5625  O   GLY   820      7.124  -8.120 -14.688  1.00 25.84
ATOM    5626  N   ILE   821      6.919  -6.360 -13.297  1.00 23.27
ATOM    5627  CA  ILE   821      7.779  -6.952 -12.277  1.00 22.14
ATOM    5628  CB  ILE   821      8.241  -5.891 -11.247  1.00 20.40
ATOM    5629  CG2 ILE   821      9.023  -6.565 -10.110  1.00 18.38
ATOM    5630  CG1 ILE   821      9.099  -4.839 -11.956  1.00 19.76
ATOM    5631  CD1 ILE   821      9.420  -3.621 -11.125  1.00 17.39
ATOM    5632  C   ILE   821      7.015  -8.065 -11.565  1.00 22.87
ATOM    5633  O   ILE   821      7.542  -9.153 -11.342  1.00 21.66
ATOM    5634  N   THR   822      5.757  -7.788 -11.238  1.00 24.23
ATOM    5635  CA  THR   822      4.916  -8.761 -10.562  1.00 28.76
ATOM    5636  CB  THR   822      3.548  -8.147 -10.196  1.00 29.81
ATOM    5637  OG1 THR   822      3.020  -7.441 -11.327  1.00 35.04
ATOM    5638  CG2 THR   822      3.697  -7.184  -9.036  1.00 29.52
ATOM    5639  C   THR   822      4.689 -10.014 -11.407  1.00 31.12
ATOM    5640  O   THR   822      4.675  -9.948 -12.638  1.00 28.97
ATOM    5641  N   GLY   823      4.514 -11.142 -10.718  1.00 33.39
ATOM    5642  CA  GLY   823      4.285 -12.431 -11.354  1.00 39.65
ATOM    5643  C   GLY   823      4.137 -12.444 -12.863  1.00 43.12
ATOM    5644  O   GLY   823      5.124 -12.358 -13.591  1.00 45.19
ATOM    5645  N   GLY   824      2.903 -12.560 -13.338  1.00 45.52
ATOM    5646  CA  GLY   824      2.671 -12.584 -14.769  1.00 47.84
ATOM    5647  C   GLY   824      1.199 -12.505 -15.103  1.00 49.56
ATOM    5648  O   GLY   824      0.818 -12.463 -16.271  1.00 50.56
ATOM    5649  N   HIS   825      0.368 -12.481 -14.068  1.00 50.83
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ATOM   5650   CA   HIS   825    -1.077 -12.408 -14.248   1.00 52.44
ATOM   5651   CB   HIS   825    -1.737 -13.633 -13.610   1.00 54.90
ATOM   5652   CG   HIS   825    -1.153 -14.935 -14.063   1.00 57.95
ATOM   5653   CD2  HIS   825    -0.491 -15.900 -13.381   1.00 58.90
ATOM   5654   ND1  HIS   825    -1.195 -15.355 -15.376   1.00 59.02
ATOM   5655   CE1  HIS   825    -0.582 -16.522 -15.483   1.00 59.10
ATOM   5656   NE2  HIS   825    -0.146 -16.874 -14.287   1.00 58.90
ATOM   5657   C    HIS   825    -1.625 -11.131 -13.613   1.00 51.18
ATOM   5658   O    HIS   825    -2.490 -11.188 -12.738   1.00 51.71
ATOM   5659   N    ILE   826    -1.120  -9.982 -14.055   1.00 50.05
ATOM   5660   CA   ILE   826    -1.566  -8.698 -13.516   1.00 48.19
ATOM   5661   CB   ILE   826    -0.883  -7.510 -14.230   1.00 48.89
ATOM   5662   CG2  ILE   826     0.631  -7.612 -14.078   1.00 50.27
ATOM   5663   CG1  ILE   826    -1.280  -7.484 -15.707   1.00 49.07
ATOM   5664   CD1  ILE   826    -0.762  -6.273 -16.460   1.00 47.09
ATOM   5665   C    ILE   826    -3.077  -8.531 -13.640   1.00 46.15
ATOM   5666   O    ILE   826    -3.707  -9.119 -14.520   1.00 45.71
ATOM   5667   N    PRO   827    -3.678  -7.719 -12.758   1.00 44.37
ATOM   5668   CD   PRO   827    -3.037  -6.920 -11.700   1.00 43.85
ATOM   5669   CA   PRO   827    -5.124  -7.485 -12.780   1.00 43.13
ATOM   5670   CB   PRO   827    -5.344  -6.592 -11.560   1.00 44.15
ATOM   5671   CG   PRO   827    -4.058  -5.841 -11.457   1.00 45.19
ATOM   5672   C    PRO   827    -5.625  -6.849 -14.073   1.00 40.91
ATOM   5673   O    PRO   827    -4.887  -6.137 -14.753   1.00 40.25
ATOM   5674   N    LYS   828    -6.884  -7.116 -14.402   1.00 39.31
ATOM   5675   CA   LYS   828    -7.500  -6.580 -15.610   1.00 37.09
ATOM   5676   CB   LYS   828    -8.976  -6.986 -15.682   1.00 40.38
ATOM   5677   CG   LYS   828    -9.236  -8.338 -16.326   1.00 45.06
ATOM   5678   CD   LYS   828    -8.689  -9.480 -15.488   1.00 46.97
ATOM   5679   CE   LYS   828    -9.021 -10.818 -16.122   1.00 47.07
ATOM   5680   NZ   LYS   828    -8.544 -11.962 -15.299   1.00 48.51
ATOM   5681   C    LYS   828    -7.405  -5.069 -15.737   1.00 32.78
ATOM   5682   O    LYS   828    -7.356  -4.552 -16.847   1.00 32.06
ATOM   5683   N    PHE   829    -7.385  -4.364 -14.608   1.00 29.83
ATOM   5684   CA   PHE   829    -7.326  -2.903 -14.625   1.00 26.91
ATOM   5685   CB   PHE   829    -7.961  -2.332 -13.350   1.00 25.84
ATOM   5686   CG   PHE   829    -7.302  -2.794 -12.077   1.00 26.76
ATOM   5687   CD1  PHE   829    -6.061  -2.289 -11.684   1.00 25.54
ATOM   5688   CD2  PHE   829    -7.914  -3.752 -11.278   1.00 25.39
ATOM   5689   CE1  PHE   829    -5.447  -2.739 -10.514   1.00 27.51
ATOM   5690   CE2  PHE   829    -7.307  -4.203 -10.112   1.00 27.40
ATOM   5691   CZ   PHE   829    -6.071  -3.697  -9.728   1.00 26.75
ATOM   5692   C    PHE   829    -5.923  -2.332 -14.789   1.00 26.04
ATOM   5693   O    PHE   829    -5.766  -1.136 -15.010   1.00 26.02
ATOM   5694   N    ALA   830    -4.910  -3.184 -14.681   1.00 24.63
ATOM   5695   CA   ALA   830    -3.529  -2.736 -14.813   1.00 23.28
ATOM   5696   CB   ALA   830    -2.643  -3.490 -13.828   1.00 21.79
ATOM   5697   C    ALA   830    -2.997  -2.914 -16.229   1.00 22.75
ATOM   5698   O    ALA   830    -3.612  -3.579 -17.062   1.00 21.73
ATOM   5699   N    LYS   831    -1.842  -2.316 -16.495   1.00 21.73
ATOM   5700   CA   LYS   831    -1.209  -2.421 -17.801   1.00 20.75
ATOM   5701   CB   LYS   831    -1.694  -1.305 -18.731   1.00 22.17
ATOM   5702   CG   LYS   831    -0.965  -1.255 -20.074   1.00 22.12
ATOM   5703   CD   LYS   831    -1.486  -0.125 -20.950   1.00 24.84
ATOM   5704   CE   LYS   831    -0.669   0.000 -22.227   1.00 27.33
ATOM   5705   NZ   LYS   831    -1.132   1.104 -23.117   1.00 27.97
ATOM   5706   C    LYS   831     0.304  -2.345 -17.665   1.00 20.84
ATOM   5707   O    LYS   831     0.839  -1.515 -16.924   1.00 20.39
ATOM   5708   N    ASN   832     0.985  -3.226 -18.387   1.00 20.11
ATOM   5709   CA   ASN   832     2.442  -3.275 -18.393   1.00 20.06
ATOM   5710   CB   ASN   832     2.915  -4.696 -18.715   1.00 19.73
ATOM   5711   CG   ASN   832     4.430  -4.820 -18.755   1.00 19.21
ATOM   5712   OD1  ASN   832     5.145  -3.832 -18.897   1.00 21.54
ATOM   5713   ND2  ASN   832     4.921  -6.045 -18.653   1.00 18.62
ATOM   5714   C    ASN   832     2.933  -2.323 -19.480   1.00 20.14
ATOM   5715   O    ASN   832     2.993  -2.693 -20.653   1.00 19.00
ATOM   5716   N    PHE   833     3.283  -1.102 -19.087   1.00 20.67
ATOM   5717   CA   PHE   833     3.764  -0.102 -20.034   1.00 20.91
ATOM   5718   CB   PHE   833     3.696   1.301 -19.418   1.00 21.37
ATOM   5719   CG   PHE   833     2.298   1.809 -19.229   1.00 21.99
ATOM   5720   CD1  PHE   833     1.581   1.505 -18.075   1.00 21.53
ATOM   5721   CD2  PHE   833     1.679   2.557 -20.228   1.00 20.96
ATOM   5722   CE1  PHE   833     0.268   1.942 -17.919   1.00 23.22
ATOM   5723   CE2  PHE   833     0.367   2.997 -20.081   1.00 22.83
ATOM   5724   CZ   PHE   833    -0.345   2.689 -18.926   1.00 21.37
ATOM   5725   C    PHE   833     5.180  -0.373 -20.526   1.00 21.48
ATOM   5726   O    PHE   833     5.595   0.162 -21.556   1.00 22.31
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ATOM	5727	N	LEU	834	5.919	-1.201	-19.793	1.00	19.73
ATOM	5728	CA	LEU	834	7.289	-1.541	-20.176	1.00	20.43
ATOM	5729	CB	LEU	834	8.037	-2.176	-18.999	1.00	19.89
ATOM	5730	CG	LEU	834	9.493	-2.566	-19.278	1.00	18.42
ATOM	5731	CD1	LEU	834	10.312	-1.300	-19.481	1.00	21.54
ATOM	5732	CD2	LEU	834	10.064	-3.383	-18.115	1.00	20.29
ATOM	5733	C	LEU	834	7.301	-2.513	-21.348	1.00	22.45
ATOM	5734	O	LEU	834	8.221	-2.506	-22.163	1.00	22.86
ATOM	5735	N	ALA	835	6.284	-3.364	-21.419	1.00	25.29
ATOM	5736	CA	ALA	835	6.190	-4.332	-22.504	1.00	29.51
ATOM	5737	CB	ALA	835	4.968	-5.221	-22.310	1.00	30.38
ATOM	5738	C	ALA	835	6.086	-3.582	-23.824	1.00	32.18
ATOM	5739	O	ALA	835	6.775	-3.911	-24.789	1.00	32.05
ATOM	5740	N	GLU	836	5.207	-2.581	-23.843	1.00	34.79
ATOM	5741	CA	GLU	836	4.973	-1.740	-25.013	1.00	38.46
ATOM	5742	CB	GLU	836	4.016	-0.595	-24.664	1.00	41.47
ATOM	5743	CG	GLU	836	2.611	-1.015	-24.239	1.00	45.34
ATOM	5744	CD	GLU	836	1.726	-1.390	-25.417	1.00	47.52
ATOM	5745	OE1	GLU	836	2.091	-2.328	-26.160	1.00	48.57
ATOM	5746	OE2	GLU	836	0.670	-0.743	-25.598	1.00	48.67
ATOM	5747	C	GLU	836	6.304	-1.151	-25.450	1.00	38.72
ATOM	5748	O	GLU	836	6.690	-1.249	-26.612	1.00	41.32
ATOM	5749	N	THR	837	6.997	-0.524	-24.506	1.00	37.17
ATOM	5750	CA	THR	837	8.284	0.072	-24.796	1.00	36.61
ATOM	5751	CB	THR	837	8.505	1.361	-23.987	1.00	36.83
ATOM	5752	OG1	THR	837	9.822	1.867	-24.253	1.00	38.80
ATOM	5753	CG2	THR	837	8.351	1.096	-22.489	1.00	35.24
ATOM	5754	C	THR	837	9.393	-0.920	-24.480	1.00	36.87
ATOM	5755	O	THR	837	9.207	-2.133	-24.616	1.00	38.89
ATOM	5756	N	GLY	838	10.546	-0.407	-24.067	1.00	33.88
ATOM	5757	CA	GLY	838	11.662	-1.272	-23.738	1.00	31.57
ATOM	5758	C	GLY	838	12.514	-0.674	-22.640	1.00	28.89
ATOM	5759	O	GLY	838	13.484	-1.277	-22.201	1.00	28.70
ATOM	5760	N	ASP	839	12.126	0.511	-22.186	1.00	28.03
ATOM	5761	CA	ASP	839	12.852	1.236	-21.154	1.00	27.44
ATOM	5762	CB	ASP	839	13.574	2.410	-21.834	1.00	32.86
ATOM	5763	CG	ASP	839	14.173	3.381	-20.859	1.00	35.56
ATOM	5764	OD1	ASP	839	13.475	4.350	-20.483	1.00	36.98
ATOM	5765	OD2	ASP	839	15.347	3.181	-20.470	1.00	40.04
ATOM	5766	C	ASP	839	11.886	1.714	-20.054	1.00	24.78
ATOM	5767	O	ASP	839	10.805	2.223	-20.349	1.00	24.31
ATOM	5768	N	ILE	840	12.274	1.550	-18.789	1.00	22.68
ATOM	5769	CA	ILE	840	11.418	1.952	-17.671	1.00	19.45
ATOM	5770	CB	ILE	840	12.087	1.625	-16.306	1.00	17.83
ATOM	5771	CG2	ILE	840	11.244	2.182	-15.154	1.00	17.98
ATOM	5772	CG1	ILE	840	12.249	0.111	-16.168	1.00	18.15
ATOM	5773	CD1	ILE	840	12.960	-0.332	-14.889	1.00	21.02
ATOM	5774	C	ILE	840	11.034	3.432	-17.708	1.00	18.92
ATOM	5775	O	ILE	840	9.879	3.783	-17.473	1.00	18.54
ATOM	5776	N	ARG	841	11.998	4.300	-17.995	1.00	19.90
ATOM	5777	CA	ARG	841	11.698	5.722	-18.067	1.00	19.12
ATOM	5778	CB	ARG	841	12.991	6.530	-18.204	1.00	18.56
ATOM	5779	CG	ARG	841	13.814	6.523	-16.916	1.00	20.62
ATOM	5780	CD	ARG	841	15.181	7.187	-17.067	1.00	21.49
ATOM	5781	NE	ARG	841	15.852	7.308	-15.774	1.00	21.81
ATOM	5782	CZ	ARG	841	16.347	6.286	-15.082	1.00	22.30
ATOM	5783	NH1	ARG	841	16.260	5.050	-15.556	1.00	21.26
ATOM	5784	NH2	ARG	841	16.914	6.501	-13.902	1.00	22.06
ATOM	5785	C	ARG	841	10.743	5.987	-19.232	1.00	18.94
ATOM	5786	O	ARG	841	9.842	6.822	-19.132	1.00	17.46
ATOM	5787	N	ALA	842	10.918	5.262	-20.331	1.00	19.89
ATOM	5788	CA	ALA	842	10.028	5.436	-21.469	1.00	20.59
ATOM	5789	CB	ALA	842	10.558	4.679	-22.677	1.00	22.80
ATOM	5790	C	ALA	842	8.638	4.921	-21.091	1.00	20.77
ATOM	5791	O	ALA	842	7.624	5.422	-21.583	1.00	22.42
ATOM	5792	N	ALA	843	8.591	3.922	-20.214	1.00	19.81
ATOM	5793	CA	ALA	843	7.320	3.346	-19.780	1.00	17.80
ATOM	5794	CB	ALA	843	7.566	2.046	-19.019	1.00	19.09
ATOM	5795	C	ALA	843	6.539	4.321	-18.910	1.00	17.75
ATOM	5796	O	ALA	843	5.310	4.411	-19.002	1.00	15.71
ATOM	5797	N	VAL	844	7.259	5.045	-18.059	1.00	17.72
ATOM	5798	CA	VAL	844	6.647	6.028	-17.183	1.00	17.43
ATOM	5799	CB	VAL	844	7.683	6.616	-16.185	1.00	15.55
ATOM	5800	CG1	VAL	844	7.074	7.786	-15.448	1.00	18.17
ATOM	5801	CG2	VAL	844	8.113	5.545	-15.169	1.00	15.06
ATOM	5802	C	VAL	844	6.063	7.159	-18.029	1.00	19.69
ATOM	5803	O	VAL	844	4.942	7.606	-17.790	1.00	19.85

ATOM	5804	N	ARG	845	6.817	7.618	-19.024	1.00	20.79
ATOM	5805	CA	ARG	845	6.325	8.695	-19.876	1.00	21.40
ATOM	5806	CB	ARG	845	7.394	9.118	-20.886	1.00	23.26
ATOM	5807	CG	ARG	845	8.621	9.752	-20.255	1.00	24.31
ATOM	5808	CD	ARG	845	9.502	10.422	-21.298	1.00	25.50
ATOM	5809	NE	ARG	845	10.126	9.470	-22.217	1.00	25.46
ATOM	5810	CZ	ARG	845	11.294	8.872	-22.001	1.00	26.44
ATOM	5811	NH1	ARG	845	11.976	9.121	-20.890	1.00	27.41
ATOM	5812	NH2	ARG	845	11.787	8.038	-22.908	1.00	24.69
ATOM	5813	C	ARG	845	5.054	8.281	-20.612	1.00	21.24
ATOM	5814	O	ARG	845	4.109	9.068	-20.733	1.00	19.90
ATOM	5815	N	GLN	846	5.029	7.044	-21.100	1.00	20.09
ATOM	5816	CA	GLN	846	3.862	6.549	-21.816	1.00	20.80
ATOM	5817	CB	GLN	846	4.140	5.163	-22.410	1.00	23.28
ATOM	5818	CG	GLN	846	2.932	4.529	-23.092	1.00	30.74
ATOM	5819	CD	GLN	846	3.280	3.266	-23.869	1.00	35.73
ATOM	5820	OE1	GLN	846	3.947	3.324	-24.904	1.00	38.70
ATOM	5821	NE2	GLN	846	2.833	2.117	-23.370	1.00	37.15
ATOM	5822	C	GLN	846	2.652	6.498	-20.889	1.00	19.10
ATOM	5823	O	GLN	846	1.527	6.809	-21.290	1.00	18.61
ATOM	5824	N	TYR	847	2.881	6.117	-19.639	1.00	18.58
ATOM	5825	CA	TYR	847	1.790	6.051	-18.676	1.00	18.17
ATOM	5826	CB	TYR	847	2.301	5.446	-17.365	1.00	17.16
ATOM	5827	CG	TYR	847	1.364	5.597	-16.189	1.00	14.88
ATOM	5828	CD1	TYR	847	0.037	5.160	-16.257	1.00	13.94
ATOM	5829	CE1	TYR	847	-0.810	5.277	-15.156	1.00	14.43
ATOM	5830	CD2	TYR	847	1.814	6.152	-14.995	1.00	14.30
ATOM	5831	CE2	TYR	847	0.980	6.272	-13.897	1.00	13.19
ATOM	5832	CZ	TYR	847	-0.321	5.839	-13.975	1.00	14.15
ATOM	5833	OH	TYR	847	-1.130	5.965	-12.876	1.00	15.40
ATOM	5834	C	TYR	847	1.222	7.453	-18.451	1.00	17.79
ATOM	5835	O	TYR	847	0.005	7.646	-18.429	1.00	18.16
ATOM	5836	N	MET	848	2.112	8.430	-18.299	1.00	19.31
ATOM	5837	CA	MET	848	1.705	9.813	-18.089	1.00	19.23
ATOM	5838	CB	MET	848	2.946	10.700	-17.931	1.00	21.20
ATOM	5839	CG	MET	848	3.724	10.462	-16.639	1.00	21.47
ATOM	5840	SD	MET	848	5.424	11.088	-16.716	1.00	22.85
ATOM	5841	CE	MET	848	5.109	12.850	-16.646	1.00	23.08
ATOM	5842	C	MET	848	0.861	10.304	-19.263	1.00	19.69
ATOM	5843	O	MET	848	-0.208	10.882	-19.075	1.00	19.25
ATOM	5844	N	ALA	849	1.339	10.051	-20.476	1.00	20.45
ATOM	5845	CA	ALA	849	0.643	10.487	-21.681	1.00	20.76
ATOM	5846	CB	ALA	849	1.537	10.280	-22.894	1.00	20.70
ATOM	5847	C	ALA	849	-0.701	9.797	-21.892	1.00	21.08
ATOM	5848	O	ALA	849	-1.699	10.456	-22.169	1.00	22.23
ATOM	5849	N	GLU	850	-0.740	8.475	-21.761	1.00	19.51
ATOM	5850	CA	GLU	850	-1.996	7.759	-21.960	1.00	20.22
ATOM	5851	CB	GLU	850	-1.751	6.250	-21.977	1.00	20.03
ATOM	5852	CG	GLU	850	-1.091	5.780	-23.261	1.00	21.40
ATOM	5853	CD	GLU	850	-0.997	4.282	-23.355	1.00	22.09
ATOM	5854	OE1	GLU	850	-1.802	3.593	-22.703	1.00	23.56
ATOM	5855	OE2	GLU	850	-0.124	3.792	-24.096	1.00	27.29
ATOM	5856	C	GLU	850	-3.075	8.108	-20.942	1.00	20.17
ATOM	5857	O	GLU	850	-4.268	7.947	-21.211	1.00	20.44
ATOM	5858	N	VAL	851	-2.666	8.574	-19.765	1.00	20.20
ATOM	5859	CA	VAL	851	-3.642	8.967	-18.752	1.00	18.55
ATOM	5860	CB	VAL	851	-2.995	9.092	-17.352	1.00	19.02
ATOM	5861	CG1	VAL	851	-3.957	9.783	-16.387	1.00	13.86
ATOM	5862	CG2	VAL	851	-2.663	7.700	-16.820	1.00	17.16
ATOM	5863	C	VAL	851	-4.266	10.305	-19.154	1.00	18.95
ATOM	5864	O	VAL	851	-5.489	10.453	-19.167	1.00	17.91
ATOM	5865	N	GLU	852	-3.424	11.270	-19.506	1.00	20.35
ATOM	5866	CA	GLU	852	-3.918	12.583	-19.895	1.00	22.19
ATOM	5867	CB	GLU	852	-2.748	13.567	-20.023	1.00	24.34
ATOM	5868	CG	GLU	852	-3.173	14.986	-20.385	1.00	28.53
ATOM	5869	CD	GLU	852	-2.073	16.009	-20.170	1.00	30.90
ATOM	5870	OE1	GLU	852	-2.210	17.137	-20.687	1.00	35.44
ATOM	5871	OE2	GLU	852	-1.079	15.696	-19.480	1.00	31.33
ATOM	5872	C	GLU	852	-4.745	12.560	-21.186	1.00	22.60
ATOM	5873	O	GLU	852	-5.634	13.393	-21.376	1.00	21.58
ATOM	5874	N	SER	853	-4.465	11.602	-22.064	1.00	23.29
ATOM	5875	CA	SER	853	-5.204	11.489	-23.322	1.00	24.06
ATOM	5876	CB	SER	853	-4.340	10.844	-24.405	1.00	26.77
ATOM	5877	OG	SER	853	-3.358	11.747	-24.879	1.00	34.21
ATOM	5878	C	SER	853	-6.473	10.671	-23.162	1.00	23.46
ATOM	5879	O	SER	853	-7.340	10.690	-24.033	1.00	21.96
ATOM	5880	N	GLY	854	-6.576	9.948	-22.052	1.00	20.67

ATOM	5881	CA	GLY	854	-7.752	9.131	-21.822	1.00	21.47
ATOM	5882	C	GLY	854	-7.620	7.744	-22.424	1.00	21.43
ATOM	5883	O	GLY	854	-8.552	6.947	-22.343	1.00	22.20
ATOM	5884	N	VAL	855	-6.472	7.459	-23.032	1.00	21.89
ATOM	5885	CA	VAL	855	-6.210	6.151	-23.636	1.00	22.78
ATOM	5886	CB	VAL	855	-4.871	6.155	-24.394	1.00	23.64
ATOM	5887	CG1	VAL	855	-4.521	4.744	-24.855	1.00	25.02
ATOM	5888	CG2	VAL	855	-4.967	7.087	-25.588	1.00	27.01
ATOM	5889	C	VAL	855	-6.160	5.071	-22.562	1.00	22.02
ATOM	5890	O	VAL	855	-6.572	3.928	-22.787	1.00	21.37
ATOM	5891	N	TYR	856	-5.632	5.448	-21.400	1.00	20.96
ATOM	5892	CA	TYR	856	-5.530	4.551	-20.252	1.00	19.68
ATOM	5893	CB	TYR	856	-4.073	4.276	-19.887	1.00	17.64
ATOM	5894	CG	TYR	856	-3.966	3.319	-18.729	1.00	18.23
ATOM	5895	CD1	TYR	856	-4.153	1.951	-18.923	1.00	17.91
ATOM	5896	CE1	TYR	856	-4.151	1.068	-17.849	1.00	17.59
ATOM	5897	CD2	TYR	856	-3.766	3.782	-17.424	1.00	19.26
ATOM	5898	CE2	TYR	856	-3.763	2.905	-16.339	1.00	16.18
ATOM	5899	CZ	TYR	856	-3.958	1.553	-16.560	1.00	18.50
ATOM	5900	OH	TYR	856	-3.975	0.676	-15.494	1.00	19.57
ATOM	5901	C	TYR	856	-6.208	5.195	-19.048	1.00	19.48
ATOM	5902	O	TYR	856	-5.951	6.360	-18.735	1.00	18.59
ATOM	5903	N	PRO	857	-7.057	4.435	-18.339	1.00	21.09
ATOM	5904	CD	PRO	857	-7.690	4.858	-17.079	1.00	22.39
ATOM	5905	CA	PRO	857	-7.373	3.034	-18.631	1.00	22.76
ATOM	5906	CB	PRO	857	-7.935	2.528	-17.309	1.00	23.94
ATOM	5907	CG	PRO	857	-8.658	3.724	-16.794	1.00	24.29
ATOM	5908	C	PRO	857	-8.355	2.860	-19.784	1.00	23.68
ATOM	5909	O	PRO	857	-9.263	3.670	-19.970	1.00	22.22
ATOM	5910	N	GLY	858	-8.166	1.797	-20.558	1.00	24.27
ATOM	5911	CA	GLY	858	-9.048	1.541	-21.684	1.00	24.39
ATOM	5912	C	GLY	858	-10.250	0.719	-21.272	1.00	25.24
ATOM	5913	O	GLY	858	-10.357	0.297	-20.122	1.00	23.87
ATOM	5914	N	GLU	859	-11.165	0.491	-22.205	1.00	25.45
ATOM	5915	CA	GLU	859	-12.344	-0.302	-21.891	1.00	28.69
ATOM	5916	CB	GLU	859	-13.185	-0.520	-23.151	1.00	31.54
ATOM	5917	CG	GLU	859	-14.435	-1.339	-22.908	1.00	34.32
ATOM	5918	CD	GLU	859	-15.420	-0.640	-21.992	1.00	37.49
ATOM	5919	OE1	GLU	859	-16.335	-1.318	-21.482	1.00	40.17
ATOM	5920	OE2	GLU	859	-15.284	0.587	-21.787	1.00	37.73
ATOM	5921	C	GLU	859	-11.911	-1.650	-21.312	1.00	28.31
ATOM	5922	O	GLU	859	-12.585	-2.207	-20.446	1.00	28.91
ATOM	5923	N	GLU	860	-10.774	-2.161	-21.779	1.00	30.25
ATOM	5924	CA	GLU	860	-10.255	-3.448	-21.313	1.00	31.44
ATOM	5925	CB	GLU	860	-9.016	-3.851	-22.119	1.00	35.44
ATOM	5926	CG	GLU	860	-9.077	-3.503	-23.593	1.00	41.38
ATOM	5927	CD	GLU	860	-8.747	-2.044	-23.853	1.00	43.62
ATOM	5928	OE1	GLU	860	-7.599	-1.637	-23.565	1.00	44.99
ATOM	5929	OE2	GLU	860	-9.633	-1.306	-24.342	1.00	44.03
ATOM	5930	C	GLU	860	-9.887	-3.455	-19.833	1.00	31.02
ATOM	5931	O	GLU	860	-9.957	-4.494	-19.177	1.00	30.50
ATOM	5932	N	HIS	861	-9.488	-2.296	-19.316	1.00	28.81
ATOM	5933	CA	HIS	861	-9.087	-2.169	-17.915	1.00	27.99
ATOM	5934	CB	HIS	861	-7.934	-1.170	-17.793	1.00	25.91
ATOM	5935	CG	HIS	861	-6.871	-1.344	-18.828	1.00	24.41
ATOM	5936	CD2	HIS	861	-6.519	-0.568	-19.880	1.00	22.82
ATOM	5937	ND1	HIS	861	-6.026	-2.432	-18.855	1.00	25.29
ATOM	5938	CE1	HIS	861	-5.199	-2.319	-19.879	1.00	22.41
ATOM	5939	NE2	HIS	861	-5.478	-1.197	-20.518	1.00	24.27
ATOM	5940	C	HIS	861	-10.235	-1.677	-17.044	1.00	27.60
ATOM	5941	O	HIS	861	-10.042	-1.385	-15.866	1.00	27.53
ATOM	5942	N	SER	862	-11.427	-1.594	-17.622	1.00	26.94
ATOM	5943	CA	SER	862	-12.580	-1.096	-16.888	1.00	27.95
ATOM	5944	CB	SER	862	-13.240	0.028	-17.686	1.00	27.74
ATOM	5945	OG	SER	862	-12.273	0.974	-18.118	1.00	28.11
ATOM	5946	C	SER	862	-13.620	-2.160	-16.548	1.00	29.39
ATOM	5947	O	SER	862	-13.764	-3.156	-17.258	1.00	28.79
ATOM	5948	N	PHE	863	-14.336	-1.936	-15.447	1.00	29.95
ATOM	5949	CA	PHE	863	-15.385	-2.842	-14.998	1.00	32.29
ATOM	5950	CB	PHE	863	-15.257	-3.141	-13.498	1.00	30.67
ATOM	5951	CG	PHE	863	-13.991	-3.858	-13.120	1.00	31.07
ATOM	5952	CD1	PHE	863	-12.912	-3.160	-12.587	1.00	31.09
ATOM	5953	CD2	PHE	863	-13.875	-5.234	-13.298	1.00	31.78
ATOM	5954	CE1	PHE	863	-11.737	-3.820	-12.231	1.00	30.30
ATOM	5955	CE2	PHE	863	-12.703	-5.905	-12.947	1.00	32.24
ATOM	5956	CZ	PHE	863	-11.633	-5.195	-12.413	1.00	32.64
ATOM	5957	C	PHE	863	-16.741	-2.197	-15.261	1.00	34.00

ATOM	5958	O	PHE	863	-16.819	-1.031	-15.651	1.00	34.45
ATOM	5959	N	HIS	864	-17.807	-2.959	-15.042	1.00	35.05
ATOM	5960	CA	HIS	864	-19.163	-2.465	-15.252	1.00	36.87
ATOM	5961	CB	HIS	864	-19.600	-2.700	-16.700	1.00	37.63
ATOM	5962	CG	HIS	864	-18.935	-1.789	-17.682	1.00	37.41
ATOM	5963	CD2	HIS	864	-18.064	-2.042	-18.688	1.00	38.33
ATOM	5964	ND1	HIS	864	-19.130	-0.425	-17.678	1.00	38.08
ATOM	5965	CE1	HIS	864	-18.408	0.123	-18.639	1.00	37.64
ATOM	5966	NE2	HIS	864	-17.752	-0.835	-19.266	1.00	37.77
ATOM	5967	C	HIS	864	-20.132	-3.147	-14.305	1.00	37.62
ATOM	5968	O	HIS	864	-21.218	-2.579	-14.068	1.00	38.24
ATOM	5969	OXT	HIS	864	-19.794	-4.250	-13.826	1.00	39.23
ATOM	5970	C1	KPL	865	-3.357	0.634	-5.095	1.00	39.96
ATOM	5971	C2	KPL	865	-3.550	1.896	-4.226	1.00	38.72
ATOM	5972	C3	KPL	865	-2.617	2.997	-4.740	1.00	39.62
ATOM	5973	C4	KPL	865	-5.003	2.393	-4.350	1.00	40.42
ATOM	5974	O1	KPL	865	-5.910	1.387	-3.884	1.00	45.23
ATOM	5975	C5	KPL	865	-3.211	1.589	-2.749	1.00	35.98
ATOM	5976	O2	KPL	865	-4.048	1.753	-1.886	1.00	36.91
ATOM	5977	C6	KPL	865	-1.855	1.081	-2.331	1.00	32.68
ATOM	5978	O3	KPL	865	-0.975	0.900	-3.150	1.00	30.34
ATOM	5979	O4	KPL	865	-1.620	0.826	-1.028	1.00	27.08
ATOM	5980	CB	MET	901	-12.712	-23.902	-0.148	1.00	60.92
ATOM	5981	CG	MET	901	-12.590	-25.152	-1.024	1.00	62.73
ATOM	5982	SD	MET	901	-10.891	-25.631	-1.435	1.00	65.23
ATOM	5983	CE	MET	901	-10.776	-25.064	-3.145	1.00	64.55
ATOM	5984	C	MET	901	-10.847	-22.440	-0.981	1.00	58.43
ATOM	5985	O	MET	901	-10.083	-23.083	-0.258	1.00	58.56
ATOM	5986	N	MET	901	-13.083	-22.466	-2.137	1.00	59.24
ATOM	5987	CA	MET	901	-12.364	-22.573	-0.834	1.00	59.60
ATOM	5988	N	LYS	902	-10.415	-21.594	-1.912	1.00	56.21
ATOM	5989	CA	LYS	902	-8.991	-21.379	-2.147	1.00	52.69
ATOM	5990	CB	LYS	902	-8.505	-22.296	-3.281	1.00	54.41
ATOM	5991	CG	LYS	902	-6.987	-22.462	-3.364	1.00	55.97
ATOM	5992	CD	LYS	902	-6.322	-21.347	-4.158	1.00	57.24
ATOM	5993	CE	LYS	902	-6.660	-21.451	-5.641	1.00	58.67
ATOM	5994	NZ	LYS	902	-5.962	-20.416	-6.455	1.00	59.28
ATOM	5995	C	LYS	902	-8.721	-19.915	-2.491	1.00	49.10
ATOM	5996	O	LYS	902	-8.688	-19.538	-3.664	1.00	49.44
ATOM	5997	N	PRO	903	-8.542	-19.065	-1.465	1.00	44.68
ATOM	5998	CD	PRO	903	-8.096	-17.671	-1.635	1.00	43.26
ATOM	5999	CA	PRO	903	-8.590	-19.422	-0.042	1.00	40.59
ATOM	6000	CB	PRO	903	-7.827	-18.281	0.615	1.00	41.44
ATOM	6001	CG	PRO	903	-8.221	-17.114	-0.230	1.00	42.64
ATOM	6002	C	PRO	903	-10.016	-19.540	0.488	1.00	37.14
ATOM	6003	O	PRO	903	-10.957	-19.042	-0.125	1.00	35.87
ATOM	6004	N	THR	904	-10.175	-20.205	1.628	1.00	32.92
ATOM	6005	CA	THR	904	-11.494	-20.369	2.227	1.00	29.48
ATOM	6006	CB	THR	904	-11.504	-21.543	3.238	1.00	29.39
ATOM	6007	OG1	THR	904	-11.161	-22.764	2.565	1.00	26.97
ATOM	6008	CG2	THR	904	-12.873	-21.690	3.869	1.00	26.63
ATOM	6009	C	THR	904	-11.857	-19.073	2.950	1.00	28.40
ATOM	6010	O	THR	904	-11.066	-18.560	3.739	1.00	27.37
ATOM	6011	N	THR	905	-13.047	-18.543	2.675	1.00	28.09
ATOM	6012	CA	THR	905	-13.487	-17.300	3.308	1.00	28.38
ATOM	6013	CB	THR	905	-13.470	-16.122	2.310	1.00	29.55
ATOM	6014	OG1	THR	905	-14.342	-16.416	1.211	1.00	31.91
ATOM	6015	CG2	THR	905	-12.066	-15.873	1.796	1.00	31.52
ATOM	6016	C	THR	905	-14.894	-17.398	3.888	1.00	27.90
ATOM	6017	O	THR	905	-15.603	-18.380	3.670	1.00	26.37
ATOM	6018	N	ILE	906	-15.288	-16.370	4.633	1.00	28.35
ATOM	6019	CA	ILE	906	-16.611	-16.331	5.244	1.00	29.75
ATOM	6020	CB	ILE	906	-16.854	-14.979	5.961	1.00	30.43
ATOM	6021	CG2	ILE	906	-18.113	-15.061	6.819	1.00	29.82
ATOM	6022	CG1	ILE	906	-15.659	-14.641	6.856	1.00	32.57
ATOM	6023	CD1	ILE	906	-15.638	-13.192	7.341	1.00	34.53
ATOM	6024	C	ILE	906	-17.661	-16.505	4.151	1.00	30.16
ATOM	6025	O	ILE	906	-18.729	-17.073	4.384	1.00	29.90
ATOM	6026	N	SER	907	-17.340	-16.021	2.955	1.00	31.30
ATOM	6027	CA	SER	907	-18.244	-16.107	1.810	1.00	32.70
ATOM	6028	CB	SER	907	-17.545	-15.593	0.547	1.00	33.26
ATOM	6029	OG	SER	907	-16.935	-14.332	0.770	1.00	34.50
ATOM	6030	C	SER	907	-18.700	-17.544	1.581	1.00	32.03
ATOM	6031	O	SER	907	-19.860	-17.793	1.255	1.00	31.78
ATOM	6032	N	LEU	908	-17.777	-18.485	1.757	1.00	32.10
ATOM	6033	CA	LEU	908	-18.071	-19.900	1.563	1.00	31.83
ATOM	6034	CB	LEU	908	-16.783	-20.723	1.643	1.00	33.59

ATOM	6035	CG	LEU	908	-16.563	-21.785	0.566	1.00	35.17
ATOM	6036	CD1	LEU	908	-15.600	-22.822	1.103	1.00	34.73
ATOM	6037	CD2	LEU	908	-17.877	-22.441	0.173	1.00	36.87
ATOM	6038	C	LEU	908	-19.073	-20.437	2.586	1.00	30.86
ATOM	6039	O	LEU	908	-20.056	-21.087	2.223	1.00	31.03
ATOM	6040	N	LEU	909	-18.818	-20.176	3.865	1.00	29.63
ATOM	6041	CA	LEU	909	-19.705	-20.643	4.926	1.00	28.90
ATOM	6042	CB	LEU	909	-19.179	-20.219	6.297	1.00	26.59
ATOM	6043	CG	LEU	909	-17.783	-20.723	6.669	1.00	26.10
ATOM	6044	CD1	LEU	909	-17.476	-20.315	8.102	1.00	25.81
ATOM	6045	CD2	LEU	909	-17.721	-22.229	6.519	1.00	27.17
ATOM	6046	C	LEU	909	-21.109	-20.093	4.750	1.00	29.37
ATOM	6047	O	LEU	909	-22.092	-20.765	5.056	1.00	28.78
ATOM	6048	N	GLN	910	-21.198	-18.861	4.266	1.00	30.45
ATOM	6049	CA	GLN	910	-22.494	-18.234	4.050	1.00	33.43
ATOM	6050	CB	GLN	910	-22.306	-16.767	3.659	1.00	33.71
ATOM	6051	CG	GLN	910	-23.589	-15.949	3.626	1.00	37.45
ATOM	6052	CD	GLN	910	-24.345	-15.976	4.944	1.00	37.83
ATOM	6053	OE1	GLN	910	-25.058	-16.935	5.250	1.00	38.97
ATOM	6054	NE2	GLN	910	-24.182	-14.924	5.738	1.00	36.67
ATOM	6055	C	GLN	910	-23.205	-19.006	2.945	1.00	33.53
ATOM	6056	O	GLN	910	-24.405	-19.258	3.028	1.00	33.64
ATOM	6057	N	LYS	911	-22.451	-19.389	1.919	1.00	35.95
ATOM	6058	CA	LYS	911	-23.004	-20.154	0.811	1.00	36.69
ATOM	6059	CB	LYS	911	-21.947	-20.387	-0.269	1.00	38.54
ATOM	6060	CG	LYS	911	-22.480	-21.146	-1.478	1.00	41.44
ATOM	6061	CD	LYS	911	-21.484	-22.170	-2.010	1.00	42.22
ATOM	6062	CE	LYS	911	-20.210	-21.525	-2.522	1.00	43.30
ATOM	6063	NZ	LYS	911	-19.319	-22.540	-3.158	1.00	44.28
ATOM	6064	C	LYS	911	-23.488	-21.504	1.326	1.00	36.17
ATOM	6065	O	LYS	911	-24.545	-21.989	0.927	1.00	36.29
ATOM	6066	N	TYR	912	-22.702	-22.108	2.214	1.00	35.44
ATOM	6067	CA	TYR	912	-23.041	-23.407	2.789	1.00	33.78
ATOM	6068	CB	TYR	912	-21.945	-23.862	3.758	1.00	35.49
ATOM	6069	CG	TYR	912	-20.707	-24.422	3.091	1.00	37.41
ATOM	6070	CD1	TYR	912	-19.533	-24.628	3.820	1.00	38.67
ATOM	6071	CE1	TYR	912	-18.395	-25.159	3.217	1.00	39.92
ATOM	6072	CD2	TYR	912	-20.710	-24.766	1.737	1.00	38.60
ATOM	6073	CE2	TYR	912	-19.580	-25.299	1.127	1.00	40.16
ATOM	6074	CZ	TYR	912	-18.428	-25.493	1.871	1.00	40.30
ATOM	6075	OH	TYR	912	-17.310	-26.021	1.270	1.00	42.12
ATOM	6076	C	TYR	912	-24.375	-23.390	3.516	1.00	33.39
ATOM	6077	O	TYR	912	-25.128	-24.359	3.460	1.00	31.55
ATOM	6078	N	LYS	913	-24.663	-22.297	4.211	1.00	32.88
ATOM	6079	CA	LYS	913	-25.920	-22.202	4.936	1.00	35.58
ATOM	6080	CB	LYS	913	-25.914	-20.999	5.878	1.00	33.03
ATOM	6081	CG	LYS	913	-27.182	-20.898	6.697	1.00	32.07
ATOM	6082	CD	LYS	913	-27.072	-19.884	7.815	1.00	29.62
ATOM	6083	CE	LYS	913	-28.360	-19.861	8.616	1.00	28.34
ATOM	6084	NZ	LYS	913	-28.225	-19.120	9.891	1.00	28.41
ATOM	6085	C	LYS	913	-27.092	-22.086	3.968	1.00	37.48
ATOM	6086	O	LYS	913	-28.156	-22.656	4.203	1.00	37.96
ATOM	6087	N	GLN	914	-26.891	-21.346	2.883	1.00	40.52
ATOM	6088	CA	GLN	914	-27.931	-21.161	1.880	1.00	43.74
ATOM	6089	CB	GLN	914	-27.498	-20.122	0.845	1.00	45.66
ATOM	6090	CG	GLN	914	-27.215	-18.745	1.427	1.00	48.82
ATOM	6091	CD	GLN	914	-26.988	-17.695	0.355	1.00	51.41
ATOM	6092	OE1	GLN	914	-27.882	-17.405	-0.442	1.00	53.67
ATOM	6093	NE2	GLN	914	-25.788	-17.122	0.327	1.00	52.30
ATOM	6094	C	GLN	914	-28.227	-22.481	1.183	1.00	44.63
ATOM	6095	O	GLN	914	-29.357	-22.735	0.768	1.00	44.57
ATOM	6096	N	GLU	915	-27.198	-23.314	1.058	1.00	45.74
ATOM	6097	CA	GLU	915	-27.327	-24.617	0.418	1.00	46.23
ATOM	6098	CB	GLU	915	-26.026	-24.988	-0.298	1.00	47.95
ATOM	6099	CG	GLU	915	-25.516	-23.913	-1.243	1.00	51.08
ATOM	6100	CD	GLU	915	-24.213	-24.299	-1.917	1.00	52.26
ATOM	6101	OE1	GLU	915	-23.270	-24.711	-1.205	1.00	53.21
ATOM	6102	OE2	GLU	915	-24.127	-24.181	-3.157	1.00	53.18
ATOM	6103	C	GLU	915	-27.654	-25.675	1.463	1.00	45.27
ATOM	6104	O	GLU	915	-27.700	-26.867	1.160	1.00	45.43
ATOM	6105	N	LYS	916	-27.874	-25.233	2.697	1.00	44.09
ATOM	6106	CA	LYS	916	-28.206	-26.138	3.792	1.00	43.28
ATOM	6107	CB	LYS	916	-29.587	-26.754	3.558	1.00	45.07
ATOM	6108	CG	LYS	916	-30.712	-25.741	3.545	1.00	46.88
ATOM	6109	CD	LYS	916	-30.921	-25.137	4.921	1.00	48.53
ATOM	6110	CE	LYS	916	-31.908	-23.981	4.871	1.00	50.30
ATOM	6111	NZ	LYS	916	-33.206	-24.382	4.267	1.00	51.08

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ATOM   6112   C     LYS   916   -27.177 -27.249   3.976   1.00 42.34
ATOM   6113   O     LYS   916   -27.519 -28.359   4.382   1.00 42.68
ATOM   6114   N     LYS   917   -25.918 -26.949   3.673   1.00 40.67
ATOM   6115   CA    LYS   917   -24.849 -27.928   3.823   1.00 38.46
ATOM   6116   CB    LYS   917   -23.865 -27.841   2.654   1.00 39.13
ATOM   6117   CG    LYS   917   -22.696 -28.814   2.781   1.00 41.58
ATOM   6118   CD    LYS   917   -21.540 -28.465   1.851   1.00 44.05
ATOM   6119   CE    LYS   917   -21.903 -28.642   0.387   1.00 46.51
ATOM   6120   NZ    LYS   917   -20.749 -28.300  -0.494   1.00 48.27
ATOM   6121   C     LYS   917   -24.095 -27.675   5.123   1.00 36.66
ATOM   6122   O     LYS   917   -23.297 -26.741   5.211   1.00 35.67
ATOM   6123   N     ARG   918   -24.355 -28.504   6.129   1.00 33.82
ATOM   6124   CA    ARG   918   -23.689 -28.373   7.420   1.00 31.81
ATOM   6125   CB    ARG   918   -24.297 -29.362   8.426   1.00 30.96
ATOM   6126   CG    ARG   918   -25.668 -28.926   8.931   1.00 32.18
ATOM   6127   CD    ARG   918   -26.346 -29.957   9.826   1.00 33.25
ATOM   6128   NE    ARG   918   -26.812 -31.128   9.084   1.00 33.83
ATOM   6129   CZ    ARG   918   -27.706 -32.000   9.544   1.00 33.54
ATOM   6130   NH1   ARG   918   -28.240 -31.840  10.747   1.00 33.73
ATOM   6131   NH2   ARG   918   -28.071 -33.036   8.801   1.00 35.50
ATOM   6132   C     ARG   918   -22.192 -28.624   7.242   1.00 29.61
ATOM   6133   O     ARG   918   -21.792 -29.565   6.557   1.00 29.96
ATOM   6134   N     PHE   919   -21.368 -27.778   7.857   1.00 26.58
ATOM   6135   CA    PHE   919   -19.911 -27.890   7.738   1.00 24.02
ATOM   6136   CB    PHE   919   -19.368 -26.625   7.062   1.00 24.17
ATOM   6137   CG    PHE   919   -19.743 -25.350   7.771   1.00 23.99
ATOM   6138   CD1   PHE   919   -18.925 -24.820   8.769   1.00 22.22
ATOM   6139   CD2   PHE   919   -20.932 -24.691   7.459   1.00 23.20
ATOM   6140   CE1   PHE   919   -19.286 -23.657   9.440   1.00 22.28
ATOM   6141   CE2   PHE   919   -21.299 -23.528   8.127   1.00 23.01
ATOM   6142   CZ    PHE   919   -20.475 -23.009   9.120   1.00 23.76
ATOM   6143   C     PHE   919   -19.206 -28.097   9.076   1.00 23.65
ATOM   6144   O     PHE   919   -19.679 -27.636  10.119   1.00 22.72
ATOM   6145   N     ALA   920   -18.071 -28.789   9.049   1.00 21.57
ATOM   6146   CA    ALA   920   -17.313 -29.028  10.276   1.00 19.22
ATOM   6147   CB    ALA   920   -16.709 -30.436  10.260   1.00 18.52
ATOM   6148   C     ALA   920   -16.213 -27.988  10.445   1.00 17.19
ATOM   6149   O     ALA   920   -15.645 -27.506   9.463   1.00 17.07
ATOM   6150   N     THR   921   -15.932 -27.644  11.701   1.00 17.33
ATOM   6151   CA    THR   921   -14.904 -26.662  12.071   1.00 17.47
ATOM   6152   CB    THR   921   -15.550 -25.358  12.581   1.00 20.30
ATOM   6153   OG1   THR   921   -16.349 -24.781  11.533   1.00 24.13
ATOM   6154   CG2   THR   921   -14.492 -24.372  12.999   1.00 27.64
ATOM   6155   C     THR   921   -14.091 -27.293  13.205   1.00 14.38
ATOM   6156   O     THR   921   -14.586 -28.182  13.892   1.00 13.90
ATOM   6157   N     ILE   922   -12.861 -26.843  13.424   1.00 13.81
ATOM   6158   CA    ILE   922   -12.054 -27.454  14.481   1.00 13.12
ATOM   6159   CB    ILE   922   -11.367 -28.728  13.943   1.00 15.52
ATOM   6160   CG2   ILE   922   -10.274 -28.341  12.925   1.00 15.80
ATOM   6161   CG1   ILE   922   -10.771 -29.531  15.102   1.00 15.54
ATOM   6162   CD1   ILE   922   -10.400 -30.953  14.734   1.00 25.56
ATOM   6163   C     ILE   922   -10.988 -26.514  15.040   1.00 13.33
ATOM   6164   O     ILE   922   -10.591 -25.555  14.375   1.00 13.71
ATOM   6165   N     THR   923   -10.533 -26.778  16.262   1.00 13.37
ATOM   6166   CA    THR   923    -9.475 -25.955  16.844   1.00 11.94
ATOM   6167   CB    THR   923    -9.471 -25.979  18.403   1.00 11.46
ATOM   6168   OG1   THR   923    -9.137 -27.294  18.866   1.00 14.02
ATOM   6169   CG2   THR   923   -10.842 -25.564  18.962   1.00 12.48
ATOM   6170   C     THR   923    -8.130 -26.494  16.358   1.00 11.04
ATOM   6171   O     THR   923    -8.010 -27.662  15.998   1.00 11.93
ATOM   6172   N     ALA   924    -7.133 -25.616  16.324   1.00 10.01
ATOM   6173   CA    ALA   924    -5.783 -25.965  15.908   1.00  9.37
ATOM   6174   CB    ALA   924    -5.634 -25.881  14.390   1.00 10.66
ATOM   6175   C     ALA   924    -4.876 -24.948  16.574   1.00  9.13
ATOM   6176   O     ALA   924    -5.262 -23.791  16.738   1.00  9.96
ATOM   6177   N     TYR   925    -3.674 -25.367  16.955   1.00  8.67
ATOM   6178   CA    TYR   925    -2.757 -24.463  17.638   1.00 10.02
ATOM   6179   CB    TYR   925    -2.809 -24.709  19.143   1.00  9.74
ATOM   6180   CG    TYR   925    -4.188 -25.007  19.687   1.00 10.81
ATOM   6181   CD1   TYR   925    -4.619 -26.328  19.842   1.00 11.73
ATOM   6182   CE1   TYR   925    -5.871 -26.625  20.373   1.00 12.92
ATOM   6183   CD2   TYR   925    -5.051 -23.982  20.069   1.00 11.21
ATOM   6184   CE2   TYR   925    -6.315 -24.269  20.603   1.00 10.91
ATOM   6185   CZ    TYR   925    -6.711 -25.592  20.752   1.00 12.01
ATOM   6186   OH    TYR   925    -7.945 -25.890  21.293   1.00 13.23
ATOM   6187   C     TYR   925    -1.326 -24.619  17.174   1.00  9.34
ATOM   6188   O     TYR   925    -0.420 -24.017  17.744   1.00 10.90
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ATOM   6189  N   ASP  926   -1.106 -25.447  16.161  1.00  8.96
ATOM   6190  CA  ASP  926    0.250 -25.626  15.672  1.00 10.92
ATOM   6191  CB  ASP  926    0.971 -26.694  16.509  1.00 11.44
ATOM   6192  CG  ASP  926    0.378 -28.093  16.328  1.00 11.32
ATOM   6193  OD1 ASP  926    0.546 -28.668  15.247  1.00 11.50
ATOM   6194  OD2 ASP  926   -0.257 -28.601  17.274  1.00 15.55
ATOM   6195  C   ASP  926    0.283 -25.982  14.186  1.00 11.52
ATOM   6196  O   ASP  926   -0.748 -26.292  13.581  1.00 13.19
ATOM   6197  N   TYR  927    1.477 -25.929  13.610  1.00  9.04
ATOM   6198  CA  TYR  927    1.693 -26.206  12.190  1.00  9.91
ATOM   6199  CB  TYR  927    3.183 -26.037  11.848  1.00 12.47
ATOM   6200  CG  TYR  927    3.599 -26.566  10.486  1.00 13.30
ATOM   6201  CD1 TYR  927    3.408 -25.805   9.332  1.00 15.77
ATOM   6202  CE1 TYR  927    3.776 -26.286   8.072  1.00 17.93
ATOM   6203  CD2 TYR  927    4.175 -27.831  10.351  1.00 14.44
ATOM   6204  CE2 TYR  927    4.548 -28.327   9.092  1.00 15.72
ATOM   6205  CZ  TYR  927    4.345 -27.552   7.961  1.00 18.75
ATOM   6206  OH  TYR  927    4.694 -28.034   6.708  1.00 20.14
ATOM   6207  C   TYR  927    1.256 -27.588  11.745  1.00 12.26
ATOM   6208  O   TYR  927    0.494 -27.732  10.791  1.00 12.34
ATOM   6209  N   SER  928    1.753 -28.602  12.446  1.00 11.45
ATOM   6210  CA  SER  928    1.468 -29.987  12.097  1.00 11.62
ATOM   6211  CB  SER  928    2.167 -30.928  13.077  1.00 12.06
ATOM   6212  OG  SER  928    3.577 -30.869  12.883  1.00 14.47
ATOM   6213  C   SER  928    0.002 -30.361  11.990  1.00 11.37
ATOM   6214  O   SER  928   -0.416 -30.992  11.008  1.00 11.30
ATOM   6215  N   PHE  929   -0.786 -30.004  12.997  1.00 10.21
ATOM   6216  CA  PHE  929   -2.202 -30.337  12.932  1.00  9.78
ATOM   6217  CB  PHE  929   -2.852 -30.267  14.319  1.00 11.80
ATOM   6218  CG  PHE  929   -2.628 -31.504  15.132  1.00 10.16
ATOM   6219  CD1 PHE  929   -1.601 -31.570  16.063  1.00  9.07
ATOM   6220  CD2 PHE  929   -3.383 -32.645  14.879  1.00 13.10
ATOM   6221  CE1 PHE  929   -1.325 -32.766  16.737  1.00 11.64
ATOM   6222  CE2 PHE  929   -3.122 -33.838  15.539  1.00 10.99
ATOM   6223  CZ  PHE  929   -2.092 -33.903  16.465  1.00 10.50
ATOM   6224  C   PHE  929   -2.956 -29.479  11.935  1.00 10.59
ATOM   6225  O   PHE  929   -3.871 -29.970  11.280  1.00 10.20
ATOM   6226  N   ALA  930   -2.579 -28.210  11.798  1.00 10.29
ATOM   6227  CA  ALA  930   -3.263 -27.341  10.835  1.00 10.49
ATOM   6228  CB  ALA  930   -2.724 -25.899  10.940  1.00 10.94
ATOM   6229  C   ALA  930   -3.028 -27.891   9.427  1.00 11.83
ATOM   6230  O   ALA  930   -3.920 -27.870   8.572  1.00 12.93
ATOM   6231  N   LYS  931   -1.807 -28.361   9.192  1.00 11.22
ATOM   6232  CA  LYS  931   -1.425 -28.924   7.894  1.00 12.92
ATOM   6233  CB  LYS  931    0.078 -29.232   7.897  1.00 13.90
ATOM   6234  CG  LYS  931    0.628 -29.953   6.669  1.00 19.23
ATOM   6235  CD  LYS  931    0.716 -29.053   5.467  1.00 22.53
ATOM   6236  CE  LYS  931    1.677 -29.628   4.415  1.00 26.66
ATOM   6237  NZ  LYS  931    1.255 -30.976   3.915  1.00 26.76
ATOM   6238  C   LYS  931   -2.227 -30.198   7.646  1.00 12.48
ATOM   6239  O   LYS  931   -2.737 -30.428   6.543  1.00 14.08
ATOM   6240  N   LEU  932   -2.326 -31.029   8.672  1.00 11.21
ATOM   6241  CA  LEU  932   -3.071 -32.273   8.557  1.00 11.84
ATOM   6242  CB  LEU  932   -2.965 -33.060   9.865  1.00 11.17
ATOM   6243  CG  LEU  932   -3.550 -34.485   9.854  1.00 11.63
ATOM   6244  CD1 LEU  932   -2.882 -35.309  10.946  1.00 10.37
ATOM   6245  CD2 LEU  932   -5.051 -34.430  10.059  1.00 12.21
ATOM   6246  C   LEU  932   -4.534 -31.991   8.212  1.00 12.85
ATOM   6247  O   LEU  932   -5.102 -32.611   7.309  1.00 14.20
ATOM   6248  N   PHE  933   -5.140 -31.039   8.913  1.00 12.43
ATOM   6249  CA  PHE  933   -6.538 -30.699   8.663  1.00 12.70
ATOM   6250  CB  PHE  933   -7.036 -29.670   9.691  1.00 12.30
ATOM   6251  CG  PHE  933   -6.939 -30.139  11.120  1.00 10.75
ATOM   6252  CD1 PHE  933   -7.001 -31.493  11.430  1.00 11.83
ATOM   6253  CD2 PHE  933   -6.788 -29.224  12.162  1.00 11.03
ATOM   6254  CE1 PHE  933   -6.911 -31.931  12.744  1.00 11.61
ATOM   6255  CE2 PHE  933   -6.699 -29.662  13.482  1.00 11.00
ATOM   6256  CZ  PHE  933   -6.758 -31.014  13.774  1.00 12.40
ATOM   6257  C   PHE  933   -6.786 -30.174   7.247  1.00 14.52
ATOM   6258  O   PHE  933   -7.675 -30.661   6.551  1.00 14.70
ATOM   6259  N   ALA  934   -6.010 -29.181   6.822  1.00 14.17
ATOM   6260  CA  ALA  934   -6.178 -28.607   5.488  1.00 16.25
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ATOM   6262  C   ALA  934   -6.029 -29.661   4.397  1.00 18.38
ATOM   6263  O   ALA  934   -6.742 -29.631   3.399  1.00 19.61
ATOM   6264  N   ASP  935   -5.094 -30.585   4.586  1.00 18.37
ATOM   6265  CA  ASP  935   -4.873 -31.632   3.605  1.00 20.68
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ATOM   6267  CG  ASP  935      -2.341 -31.618   3.716  1.00 24.26
ATOM   6268  OD1 ASP  935      -2.426 -30.459   3.253  1.00 28.99
ATOM   6269  OD2 ASP  935      -1.256 -32.155   4.001  1.00 24.81
ATOM   6270  C   ASP  935      -6.050 -32.588   3.492  1.00 21.54
ATOM   6271  O   ASP  935      -6.152 -33.332   2.518  1.00 21.57
ATOM   6272  N   GLU  936      -6.937 -32.570   4.481  1.00 21.31
ATOM   6273  CA  GLU  936      -8.107 -33.449   4.466  1.00 23.46
ATOM   6274  CB  GLU  936      -8.300 -34.119   5.830  1.00 22.13
ATOM   6275  CG  GLU  936      -7.196 -35.073   6.234  1.00 25.30
ATOM   6276  CD  GLU  936      -6.944 -36.134   5.184  1.00 26.05
ATOM   6277  OE1 GLU  936      -7.932 -36.697   4.664  1.00 27.53
ATOM   6278  OE2 GLU  936      -5.768 -36.408   4.890  1.00 25.51
ATOM   6279  C   GLU  936      -9.395 -32.727   4.090  1.00 23.90
ATOM   6280  O   GLU  936     -10.433 -33.367   3.928  1.00 23.71
ATOM   6281  N   GLY  937      -9.335 -31.404   3.966  1.00 24.48
ATOM   6282  CA  GLY  937     -10.527 -30.654   3.603  1.00 24.58
ATOM   6283  C   GLY  937     -11.155 -29.831   4.714  1.00 24.70
ATOM   6284  O   GLY  937     -12.136 -29.116   4.481  1.00 22.63
ATOM   6285  N   LEU  938     -10.614 -29.942   5.925  1.00 21.96
ATOM   6286  CA  LEU  938     -11.115 -29.177   7.071  1.00 22.24
ATOM   6287  CB  LEU  938     -10.749 -29.878   8.389  1.00 22.44
ATOM   6288  CG  LEU  938     -11.881 -30.305   9.325  1.00 24.89
ATOM   6289  CD1 LEU  938     -11.300 -30.960  10.565  1.00 20.46
ATOM   6290  CD2 LEU  938     -12.736 -29.116   9.706  1.00 23.65
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ATOM   6294  CA  ASN  939     -10.447 -25.546   6.136  1.00 20.12
ATOM   6295  CB  ASN  939     -10.577 -25.159   4.657  1.00 21.00
ATOM   6296  CG  ASN  939     -10.119 -26.267   3.720  1.00 24.01
ATOM   6297  OD1 ASN  939      -9.005 -26.783   3.846  1.00 24.14
ATOM   6298  ND2 ASN  939     -10.974 -26.632   2.768  1.00 24.93
ATOM   6299  C   ASN  939     -10.959 -24.393   7.000  1.00 17.21
ATOM   6300  O   ASN  939     -10.813 -23.234   6.631  1.00 17.54
ATOM   6301  N   VAL  940     -11.564 -24.705   8.139  1.00 15.30
ATOM   6302  CA  VAL  940     -12.038 -23.664   9.048  1.00 12.98
ATOM   6303  CB  VAL  940     -13.566 -23.629   9.156  1.00 13.67
ATOM   6304  CG1 VAL  940     -13.986 -22.479  10.070  1.00 14.67
ATOM   6305  CG2 VAL  940     -14.186 -23.453   7.778  1.00 15.61
ATOM   6306  C   VAL  940     -11.459 -24.001  10.409  1.00 12.24
ATOM   6307  O   VAL  940     -11.854 -24.987  11.032  1.00 11.95
ATOM   6308  N   MET  941     -10.525 -23.182  10.877  1.00 11.66
ATOM   6309  CA  MET  941      -9.887 -23.474  12.145  1.00 11.33
ATOM   6310  CB  MET  941      -8.453 -23.897  11.884  1.00 11.01
ATOM   6311  CG  MET  941      -8.355 -25.076  10.935  1.00 15.14
ATOM   6312  SD  MET  941      -6.605 -25.492  10.723  1.00 13.23
ATOM   6313  CE  MET  941      -6.628 -25.995   9.032  1.00 16.00
ATOM   6314  C   MET  941      -9.935 -22.338  13.136  1.00 11.83
ATOM   6315  O   MET  941      -9.909 -21.166  12.771  1.00 12.66
ATOM   6316  N   LEU  942     -10.020 -22.710  14.404  1.00 10.99
ATOM   6317  CA  LEU  942     -10.094 -21.738  15.469  1.00 12.19
ATOM   6318  CB  LEU  942     -11.409 -21.938  16.240  1.00 15.75
ATOM   6319  CG  LEU  942     -11.850 -21.101  17.453  1.00 20.87
ATOM   6320  CD1 LEU  942     -11.333 -21.740  18.697  1.00 25.90
ATOM   6321  CD2 LEU  942     -11.405 -19.631  17.337  1.00 18.03
ATOM   6322  C   LEU  942      -8.903 -21.821  16.416  1.00 12.22
ATOM   6323  O   LEU  942      -8.639 -22.864  17.009  1.00 11.14
ATOM   6324  N   VAL  943      -8.160 -20.728  16.528  1.00 11.13
ATOM   6325  CA  VAL  943      -7.048 -20.703  17.464  1.00 10.52
ATOM   6326  CB  VAL  943      -5.889 -19.821  16.965  1.00 10.69
ATOM   6327  CG1 VAL  943      -4.792 -19.752  18.031  1.00 11.40
ATOM   6328  CG2 VAL  943      -5.311 -20.422  15.685  1.00 13.59
ATOM   6329  C   VAL  943      -7.721 -20.095  18.690  1.00 11.08
ATOM   6330  O   VAL  943      -7.761 -18.874  18.863  1.00 11.38
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ATOM   6332  CA  GLY  944      -8.984 -20.502  20.701  1.00 12.63
ATOM   6333  C   GLY  944      -8.220 -20.504  22.000  1.00 11.45
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ATOM   6335  N   ASP  945      -8.758 -19.791  22.986  1.00 10.87
ATOM   6336  CA  ASP  945      -8.094 -19.714  24.277  1.00 11.19
ATOM   6337  CB  ASP  945      -8.602 -18.519  25.103  1.00 12.84
ATOM   6338  CG  ASP  945     -10.096 -18.559  25.382  1.00 15.40
ATOM   6339  OD1 ASP  945     -10.741 -19.580  25.119  1.00 14.02
ATOM   6340  OD2 ASP  945     -10.612 -17.544  25.888  1.00 16.56
ATOM   6341  C   ASP  945      -8.216 -21.021  25.034  1.00 10.85
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ATOM	6343	N	SER	946	-8.829	-22.019	24.392	1.00	10.80
ATOM	6344	CA	SER	946	-8.929	-23.346	25.000	1.00	11.18
ATOM	6345	CB	SER	946	-9.751	-24.282	24.109	1.00	13.04
ATOM	6346	OG	SER	946	-9.361	-24.167	22.750	1.00	13.51
ATOM	6347	C	SER	946	-7.483	-23.841	25.098	1.00	12.33
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ATOM	6349	N	LEU	947	-6.608	-23.241	24.292	1.00	9.71
ATOM	6350	CA	LEU	947	-5.189	-23.620	24.319	1.00	10.28
ATOM	6351	CB	LEU	947	-4.386	-22.834	23.260	1.00	9.98
ATOM	6352	CG	LEU	947	-4.241	-21.308	23.369	1.00	10.69
ATOM	6353	CD1	LEU	947	-3.110	-20.959	24.301	1.00	10.73
ATOM	6354	CD2	LEU	947	-3.955	-20.712	21.980	1.00	11.38
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ATOM	6357	N	GLY	948	-5.214	-22.474	26.468	1.00	9.77
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ATOM	6361	N	MET	949	-5.684	-24.389	28.325	1.00	10.94
ATOM	6362	CA	MET	949	-5.795	-25.637	29.063	1.00	12.90
ATOM	6363	CB	MET	949	-7.271	-25.952	29.349	1.00	12.40
ATOM	6364	CG	MET	949	-7.987	-24.849	30.130	1.00	15.92
ATOM	6365	SD	MET	949	-9.725	-25.184	30.491	1.00	22.24
ATOM	6366	CE	MET	949	-9.565	-26.325	31.869	1.00	23.74
ATOM	6367	C	MET	949	-5.153	-26.794	28.313	1.00	13.79
ATOM	6368	O	MET	949	-4.272	-27.473	28.840	1.00	13.01
ATOM	6369	N	THR	950	-5.577	-27.003	27.072	1.00	13.13
ATOM	6370	CA	THR	950	-5.061	-28.104	26.271	1.00	14.84
ATOM	6371	CB	THR	950	-5.885	-28.243	24.975	1.00	18.87
ATOM	6372	OG1	THR	950	-5.665	-29.536	24.407	1.00	27.10
ATOM	6373	CG2	THR	950	-5.492	-27.177	23.971	1.00	15.75
ATOM	6374	C	THR	950	-3.570	-28.027	25.922	1.00	14.92
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ATOM	6376	N	VAL	951	-3.064	-26.819	25.688	1.00	12.91
ATOM	6377	CA	VAL	951	-1.663	-26.639	25.330	1.00	12.41
ATOM	6378	CB	VAL	951	-1.532	-25.597	24.174	1.00	13.11
ATOM	6379	CG1	VAL	951	-0.074	-25.297	23.888	1.00	13.39
ATOM	6380	CG2	VAL	951	-2.217	-26.131	22.918	1.00	13.74
ATOM	6381	C	VAL	951	-0.769	-26.213	26.502	1.00	12.91
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ATOM	6386	CG	GLN	952	-0.456	-22.295	27.299	1.00	10.22
ATOM	6387	CD	GLN	952	-0.885	-20.862	27.509	1.00	10.55
ATOM	6388	OE1	GLN	952	-1.485	-20.527	28.523	1.00	11.30
ATOM	6389	NE2	GLN	952	-0.571	-20.006	26.547	1.00	6.63
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ATOM	6395	O	GLY	953	-2.296	-26.531	33.344	1.00	13.99
ATOM	6396	N	HIS	954	-3.118	-24.953	31.971	1.00	12.29
ATOM	6397	CA	HIS	954	-3.727	-24.206	33.067	1.00	12.78
ATOM	6398	CB	HIS	954	-3.889	-22.731	32.700	1.00	11.26
ATOM	6399	CG	HIS	954	-2.589	-22.013	32.546	1.00	13.33
ATOM	6400	CD2	HIS	954	-2.013	-21.430	31.470	1.00	13.37
ATOM	6401	ND1	HIS	954	-1.706	-21.852	33.591	1.00	13.34
ATOM	6402	CE1	HIS	954	-0.640	-21.200	33.165	1.00	15.92
ATOM	6403	NE2	HIS	954	-0.801	-20.931	31.882	1.00	13.61
ATOM	6404	C	HIS	954	-5.083	-24.814	33.357	1.00	13.36
ATOM	6405	O	HIS	954	-5.605	-25.594	32.555	1.00	13.27
ATOM	6406	N	ASP	955	-5.644	-24.458	34.511	1.00	16.24
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ATOM	6408	CB	ASP	955	-7.060	-24.882	36.473	1.00	23.17
ATOM	6409	CG	ASP	955	-6.943	-23.457	36.998	1.00	27.78
ATOM	6410	OD1	ASP	955	-7.656	-22.566	36.495	1.00	31.02
ATOM	6411	OD2	ASP	955	-6.145	-23.231	37.932	1.00	32.90
ATOM	6412	C	ASP	955	-8.131	-24.221	34.315	1.00	17.97
ATOM	6413	O	ASP	955	-9.295	-24.605	34.493	1.00	16.08
ATOM	6414	N	SER	956	-7.825	-23.151	33.593	1.00	15.35
ATOM	6415	CA	SER	956	-8.845	-22.364	32.926	1.00	14.44
ATOM	6416	CB	SER	956	-9.444	-21.320	33.878	1.00	14.03
ATOM	6417	OG	SER	956	-8.533	-20.269	34.155	1.00	12.64
ATOM	6418	C	SER	956	-8.196	-21.676	31.732	1.00	13.94
ATOM	6419	O	SER	956	-6.994	-21.806	31.517	1.00	12.60

ATOM	6420	N	THR	957	-8.997	-20.955	30.953	1.00	12.70
ATOM	6421	CA	THR	957	-8.495	-20.259	29.774	1.00	11.18
ATOM	6422	CB	THR	957	-9.579	-20.165	28.690	1.00	10.23
ATOM	6423	OG1	THR	957	-10.710	-19.468	29.217	1.00	12.66
ATOM	6424	CG2	THR	957	-10.017	-21.566	28.231	1.00	13.69
ATOM	6425	C	THR	957	-8.047	-18.834	30.114	1.00	10.60
ATOM	6426	O	THR	957	-7.415	-18.164	29.295	1.00	9.48
ATOM	6427	N	LEU	958	-8.373	-18.371	31.318	1.00	11.09
ATOM	6428	CA	LEU	958	-8.042	-16.999	31.718	1.00	10.38
ATOM	6429	CB	LEU	958	-8.483	-16.756	33.167	1.00	11.85
ATOM	6430	CG	LEU	958	-9.962	-16.399	33.380	1.00	14.28
ATOM	6431	CD1	LEU	958	-10.854	-17.587	33.066	1.00	13.28
ATOM	6432	CD2	LEU	958	-10.159	-15.961	34.824	1.00	16.63
ATOM	6433	C	LEU	958	-6.589	-16.545	31.525	1.00	10.13
ATOM	6434	O	LEU	958	-6.336	-15.413	31.106	1.00	10.74
ATOM	6435	N	PRO	959	-5.611	-17.417	31.819	1.00	11.82
ATOM	6436	CD	PRO	959	-5.694	-18.691	32.549	1.00	12.19
ATOM	6437	CA	PRO	959	-4.211	-17.015	31.645	1.00	10.66
ATOM	6438	CB	PRO	959	-3.437	-18.170	32.284	1.00	13.42
ATOM	6439	CG	PRO	959	-4.389	-19.328	32.170	1.00	19.51
ATOM	6440	C	PRO	959	-3.722	-16.711	30.225	1.00	10.61
ATOM	6441	O	PRO	959	-2.674	-16.086	30.054	1.00	9.35
ATOM	6442	N	VAL	960	-4.470	-17.139	29.214	1.00	10.44
ATOM	6443	CA	VAL	960	-4.071	-16.924	27.821	1.00	9.62
ATOM	6444	CB	VAL	960	-5.046	-17.647	26.858	1.00	10.31
ATOM	6445	CG1	VAL	960	-4.578	-17.492	25.408	1.00	9.19
ATOM	6446	CG2	VAL	960	-5.119	-19.116	27.212	1.00	10.51
ATOM	6447	C	VAL	960	-4.017	-15.455	27.455	1.00	11.03
ATOM	6448	O	VAL	960	-4.992	-14.723	27.639	1.00	9.26
ATOM	6449	N	THR	961	-2.890	-15.012	26.917	1.00	11.69
ATOM	6450	CA	THR	961	-2.800	-13.610	26.553	1.00	12.59
ATOM	6451	CB	THR	961	-1.512	-12.975	27.142	1.00	16.60
ATOM	6452	OG1	THR	961	-1.351	-13.392	28.510	1.00	22.57
ATOM	6453	CG2	THR	961	-1.587	-11.461	27.095	1.00	22.84
ATOM	6454	C	THR	961	-2.854	-13.423	25.040	1.00	11.62
ATOM	6455	O	THR	961	-2.785	-14.393	24.272	1.00	8.55
ATOM	6456	N	VAL	962	-2.989	-12.171	24.613	1.00	8.97
ATOM	6457	CA	VAL	962	-3.059	-11.870	23.189	1.00	9.43
ATOM	6458	CB	VAL	962	-3.205	-10.344	22.954	1.00	12.17
ATOM	6459	CG1	VAL	962	-3.243	-10.044	21.457	1.00	9.65
ATOM	6460	CG2	VAL	962	-4.464	-9.842	23.640	1.00	15.11
ATOM	6461	C	VAL	962	-1.813	-12.390	22.486	1.00	10.49
ATOM	6462	O	VAL	962	-1.902	-13.023	21.434	1.00	10.98
ATOM	6463	N	ALA	963	-0.650	-12.142	23.080	1.00	9.85
ATOM	6464	CA	ALA	963	0.602	-12.604	22.489	1.00	10.83
ATOM	6465	CB	ALA	963	1.770	-12.235	23.397	1.00	10.40
ATOM	6466	C	ALA	963	0.564	-14.120	22.258	1.00	10.40
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ATOM	6468	N	ASP	964	-0.031	-14.866	23.195	1.00	12.44
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ATOM	6470	CB	ASP	964	-0.818	-16.961	24.289	1.00	11.14
ATOM	6471	CG	ASP	964	-0.006	-16.816	25.572	1.00	13.23
ATOM	6472	OD1	ASP	964	1.239	-16.781	25.528	1.00	11.81
ATOM	6473	OD2	ASP	964	-0.627	-16.761	26.648	1.00	12.48
ATOM	6474	C	ASP	964	-0.966	-16.692	21.833	1.00	11.21
ATOM	6475	O	ASP	964	-0.583	-17.561	21.048	1.00	6.94
ATOM	6476	N	ILE	965	-2.113	-16.037	21.680	1.00	8.84
ATOM	6477	CA	ILE	965	-2.978	-16.292	20.539	1.00	9.08
ATOM	6478	CB	ILE	965	-4.279	-15.435	20.593	1.00	9.58
ATOM	6479	CG2	ILE	965	-5.067	-15.617	19.298	1.00	7.50
ATOM	6480	CG1	ILE	965	-5.125	-15.814	21.813	1.00	8.04
ATOM	6481	CD1	ILE	965	-5.829	-17.185	21.739	1.00	9.87
ATOM	6482	C	ILE	965	-2.237	-15.970	19.244	1.00	9.13
ATOM	6483	O	ILE	965	-2.305	-16.725	18.267	1.00	8.12
ATOM	6484	N	ALA	966	-1.519	-14.851	19.231	1.00	9.33
ATOM	6485	CA	ALA	966	-0.772	-14.453	18.026	1.00	7.88
ATOM	6486	CB	ALA	966	-0.161	-13.046	18.215	1.00	10.51
ATOM	6487	C	ALA	966	0.325	-15.459	17.665	1.00	6.25
ATOM	6488	O	ALA	966	0.623	-15.694	16.484	1.00	8.05
ATOM	6489	N	TYR	967	0.954	-16.023	18.690	1.00	7.24
ATOM	6490	CA	TYR	967	2.007	-17.022	18.487	1.00	7.41
ATOM	6491	CB	TYR	967	2.602	-17.433	19.847	1.00	8.25
ATOM	6492	CG	TYR	967	3.602	-18.579	19.775	1.00	9.15
ATOM	6493	CD1	TYR	967	4.858	-18.406	19.191	1.00	10.05
ATOM	6494	CE1	TYR	967	5.787	-19.444	19.151	1.00	12.77
ATOM	6495	CD2	TYR	967	3.296	-19.826	20.314	1.00	9.48
ATOM	6496	CE2	TYR	967	4.217	-20.876	20.278	1.00	13.60

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ATOM   6497  CZ   TYR  967      5.462 -20.673  19.695  1.00 13.29
ATOM   6498  OH   TYR  967      6.394 -21.697  19.655  1.00 13.05
ATOM   6499  C    TYR  967      1.454 -18.266  17.772  1.00  6.51
ATOM   6500  O    TYR  967      2.013 -18.745  16.776  1.00  5.94
ATOM   6501  N    HIS  968      0.347 -18.783  18.296  1.00  9.58
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ATOM   6503  CB   HIS  968     -1.238 -20.593  18.784  1.00  8.45
ATOM   6504  CG   HIS  968     -0.533 -21.162  19.988  1.00  9.03
ATOM   6505  CD2  HIS  968     -0.357 -20.670  21.241  1.00  8.58
ATOM   6506  ND1  HIS  968      0.147 -22.360  19.954  1.00  8.08
ATOM   6507  CE1  HIS  968      0.714 -22.582  21.129  1.00  9.22
ATOM   6508  NE2  HIS  968      0.424 -21.573  21.929  1.00  7.98
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ATOM   6510  O    HIS  968     -1.057 -20.590  15.536  1.00  9.61
ATOM   6511  N    THR  969     -1.468 -18.486  16.237  1.00 10.09
ATOM   6512  CA   THR  969     -2.135 -18.099  15.001  1.00  8.73
ATOM   6513  CB   THR  969     -2.773 -16.698  15.148  1.00 11.74
ATOM   6514  OG1  THR  969     -3.878 -16.774  16.066  1.00 12.00
ATOM   6515  CG2  THR  969     -3.276 -16.182  13.791  1.00 10.32
ATOM   6516  C    THR  969     -1.160 -18.118  13.822  1.00 10.38
ATOM   6517  O    THR  969     -1.506 -18.557  12.719  1.00 10.24
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ATOM   6519  CA   ALA  970      1.076 -17.624  13.001  1.00  9.33
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ATOM   6521  C    ALA  970      1.497 -19.046  12.608  1.00 10.42
ATOM   6522  O    ALA  970      1.805 -19.311  11.445  1.00 10.11
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ATOM   6525  CB   ALA  971      2.043 -22.065  14.685  1.00 10.14
ATOM   6526  C    ALA  971      0.808 -22.037  12.520  1.00  7.88
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ATOM   6528  N    VAL  972     -0.447 -21.816  12.892  1.00  9.57
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ATOM   6536  CA   ARG  973     -1.359 -20.052   9.206  1.00 12.00
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ATOM   6538  CG   ARG  973     -1.127 -17.808   7.926  1.00 14.67
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ATOM   6543  NH2  ARG  973     -5.819 -17.045   7.533  1.00 13.03
ATOM   6544  C    ARG  973     -0.260 -20.666   8.349  1.00 11.81
ATOM   6545  O    ARG  973     -0.438 -20.851   7.139  1.00 13.18
ATOM   6546  N    ARG  974      0.880 -20.979   8.960  1.00 10.93
ATOM   6547  CA   ARG  974      1.971 -21.585   8.194  1.00 12.60
ATOM   6548  CB   ARG  974      3.251 -21.701   9.033  1.00 10.96
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ATOM   6559  C    GLY  975     -0.792 -25.049   7.222  1.00 12.25
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ATOM   6561  N    ALA  976     -1.617 -24.002   7.273  1.00 11.12
ATOM   6562  CA   ALA  976     -2.817 -23.896   6.441  1.00 11.30
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ATOM   6568  CA   PRO  977     -2.179 -20.773   4.288  1.00 15.20
ATOM   6569  CB   PRO  977     -1.014 -20.783   3.304  1.00 15.29
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ATOM	6575	CB	ASN	978	-5.770	-21.725	1.330	1.00	21.84
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ATOM	6583	CB	CYS	979	-7.427	-22.656	6.803	1.00	15.73
ATOM	6584	SG	CYS	979	-6.617	-21.757	8.193	1.00	17.53
ATOM	6585	C	CYS	979	-8.469	-20.495	6.096	1.00	13.52
ATOM	6586	O	CYS	979	-7.869	-19.416	6.035	1.00	15.76
ATOM	6587	N	LEU	980	-9.709	-20.603	6.559	1.00	13.60
ATOM	6588	CA	LEU	980	-10.396	-19.458	7.148	1.00	11.99
ATOM	6589	CB	LEU	980	-11.914	-19.582	7.017	1.00	13.15
ATOM	6590	CG	LEU	980	-12.747	-18.553	7.795	1.00	13.09
ATOM	6591	CD1	LEU	980	-12.439	-17.144	7.313	1.00	17.24
ATOM	6592	CD2	LEU	980	-14.229	-18.871	7.628	1.00	13.80
ATOM	6593	C	LEU	980	-9.970	-19.627	8.604	1.00	11.62
ATOM	6594	O	LEU	980	-10.336	-20.601	9.262	1.00	11.81
ATOM	6595	N	LEU	981	-9.187	-18.677	9.099	1.00	12.13
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ATOM	6598	CG	LEU	981	-6.195	-18.853	11.539	1.00	12.12
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ATOM	6604	CA	LEU	982	-10.604	-17.564	13.485	1.00	10.87
ATOM	6605	CB	LEU	982	-11.948	-18.140	13.951	1.00	12.12
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ATOM	6609	C	LEU	982	-9.659	-17.532	14.675	1.00	12.49
ATOM	6610	O	LEU	982	-8.991	-18.521	14.951	1.00	12.63
ATOM	6611	N	ALA	983	-9.579	-16.400	15.364	1.00	11.23
ATOM	6612	CA	ALA	983	-8.715	-16.324	16.533	1.00	11.28
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ATOM	6619	CG	ASP	984	-11.332	-17.763	21.159	1.00	16.37
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ATOM	6631	O	LEU	985	-10.840	-13.590	23.606	1.00	12.15
ATOM	6632	N	PRO	986	-8.651	-13.315	24.034	1.00	10.32
ATOM	6633	CD	PRO	986	-7.280	-12.891	23.695	1.00	10.52
ATOM	6634	CA	PRO	986	-8.698	-13.906	25.372	1.00	11.35
ATOM	6635	CB	PRO	986	-7.238	-14.221	25.633	1.00	12.21
ATOM	6636	CG	PRO	986	-6.563	-13.023	25.015	1.00	12.75
ATOM	6637	C	PRO	986	-9.309	-13.046	26.482	1.00	10.95
ATOM	6638	O	PRO	986	-9.721	-11.914	26.255	1.00	10.33
ATOM	6639	N	PHE	987	-9.364	-13.614	27.684	1.00	9.49
ATOM	6640	CA	PHE	987	-9.913	-12.938	28.856	1.00	10.31
ATOM	6641	CB	PHE	987	-9.524	-13.722	30.118	1.00	10.30
ATOM	6642	CG	PHE	987	-9.770	-12.984	31.418	1.00	11.95
ATOM	6643	CD1	PHE	987	-11.054	-12.630	31.821	1.00	12.08
ATOM	6644	CD2	PHE	987	-8.705	-12.697	32.265	1.00	11.62
ATOM	6645	CE1	PHE	987	-11.272	-11.999	33.054	1.00	13.41
ATOM	6646	CE2	PHE	987	-8.910	-12.070	33.493	1.00	12.09
ATOM	6647	CZ	PHE	987	-10.196	-11.724	33.885	1.00	13.88
ATOM	6648	C	PHE	987	-9.421	-11.491	28.955	1.00	11.22
ATOM	6649	O	PHE	987	-8.223	-11.220	28.861	1.00	9.94
ATOM	6650	N	MET	988	-10.371	-10.579	29.136	1.00	10.88

ATOM	6651	CA	MET	988	-10.118	-9.153	29.274	1.00	12.00
ATOM	6652	CB	MET	988	-9.447	-8.854	30.630	1.00	11.75
ATOM	6653	CG	MET	988	-9.721	-7.436	31.166	1.00	13.31
ATOM	6654	SD	MET	988	-11.475	-7.116	31.566	1.00	13.55
ATOM	6655	CE	MET	988	-11.538	-7.686	33.263	1.00	18.85
ATOM	6656	C	MET	988	-9.300	-8.512	28.159	1.00	13.38
ATOM	6657	O	MET	988	-8.568	-7.556	28.411	1.00	16.30
ATOM	6658	N	ALA	989	-9.420	-9.019	26.937	1.00	11.97
ATOM	6659	CA	ALA	989	-8.681	-8.450	25.816	1.00	12.87
ATOM	6660	CB	ALA	989	-8.073	-9.568	24.953	1.00	11.39
ATOM	6661	C	ALA	989	-9.585	-7.554	24.959	1.00	12.13
ATOM	6662	O	ALA	989	-9.158	-7.019	23.938	1.00	14.24
ATOM	6663	N	TYR	990	-10.833	-7.391	25.389	1.00	11.11
ATOM	6664	CA	TYR	990	-11.786	-6.538	24.694	1.00	11.34
ATOM	6665	CB	TYR	990	-12.591	-7.352	23.660	1.00	11.56
ATOM	6666	CG	TYR	990	-13.140	-8.668	24.180	1.00	14.52
ATOM	6667	CD1	TYR	990	-14.464	-8.776	24.593	1.00	11.96
ATOM	6668	CE1	TYR	990	-14.979	-9.979	25.082	1.00	14.62
ATOM	6669	CD2	TYR	990	-12.327	-9.802	24.267	1.00	12.94
ATOM	6670	CE2	TYR	990	-12.825	-11.017	24.759	1.00	14.62
ATOM	6671	CZ	TYR	990	-14.156	-11.091	25.163	1.00	15.49
ATOM	6672	OH	TYR	990	-14.675	-12.270	25.655	1.00	18.21
ATOM	6673	C	TYR	990	-12.706	-5.851	25.711	1.00	12.49
ATOM	6674	O	TYR	990	-13.906	-5.689	25.481	1.00	14.32
ATOM	6675	N	ALA	991	-12.116	-5.430	26.827	1.00	12.73
ATOM	6676	CA	ALA	991	-12.844	-4.770	27.913	1.00	12.56
ATOM	6677	CB	ALA	991	-11.927	-4.561	29.104	1.00	11.96
ATOM	6678	C	ALA	991	-13.424	-3.434	27.478	1.00	12.37
ATOM	6679	O	ALA	991	-14.410	-2.963	28.044	1.00	12.98
ATOM	6680	N	THR	992	-12.779	-2.803	26.505	1.00	13.27
ATOM	6681	CA	THR	992	-13.248	-1.527	25.967	1.00	13.52
ATOM	6682	CB	THR	992	-12.390	-0.333	26.462	1.00	15.27
ATOM	6683	OG1	THR	992	-11.069	-0.437	25.918	1.00	15.35
ATOM	6684	CG2	THR	992	-12.286	-0.326	27.983	1.00	15.49
ATOM	6685	C	THR	992	-13.093	-1.640	24.454	1.00	15.81
ATOM	6686	O	THR	992	-12.316	-2.463	23.965	1.00	11.88
ATOM	6687	N	PRO	993	-13.849	-0.839	23.690	1.00	14.26
ATOM	6688	CD	PRO	993	-15.022	-0.033	24.082	1.00	14.65
ATOM	6689	CA	PRO	993	-13.723	-0.912	22.233	1.00	15.27
ATOM	6690	CB	PRO	993	-14.663	0.189	21.756	1.00	13.69
ATOM	6691	CG	PRO	993	-15.781	0.103	22.771	1.00	14.48
ATOM	6692	C	PRO	993	-12.279	-0.675	21.794	1.00	15.17
ATOM	6693	O	PRO	993	-11.745	-1.403	20.955	1.00	14.48
ATOM	6694	N	GLU	994	-11.656	0.343	22.383	1.00	14.90
ATOM	6695	CA	GLU	994	-10.284	0.714	22.068	1.00	16.61
ATOM	6696	CB	GLU	994	-9.847	1.881	22.951	1.00	20.94
ATOM	6697	CG	GLU	994	-8.673	2.652	22.415	1.00	29.96
ATOM	6698	CD	GLU	994	-8.335	3.857	23.277	1.00	32.49
ATOM	6699	OE1	GLU	994	-7.498	3.719	24.199	1.00	35.55
ATOM	6700	OE2	GLU	994	-8.923	4.934	23.038	1.00	33.67
ATOM	6701	C	GLU	994	-9.313	-0.447	22.256	1.00	15.95
ATOM	6702	O	GLU	994	-8.439	-0.675	21.421	1.00	14.70
ATOM	6703	N	GLN	995	-9.455	-1.170	23.361	1.00	14.74
ATOM	6704	CA	GLN	995	-8.586	-2.307	23.625	1.00	14.57
ATOM	6705	CB	GLN	995	-8.758	-2.793	25.058	1.00	15.85
ATOM	6706	CG	GLN	995	-8.325	-1.765	26.084	1.00	22.47
ATOM	6707	CD	GLN	995	-8.360	-2.315	27.480	1.00	26.05
ATOM	6708	OE1	GLN	995	-7.468	-3.057	27.886	1.00	27.48
ATOM	6709	NE2	GLN	995	-9.414	-1.980	28.225	1.00	29.12
ATOM	6710	C	GLN	995	-8.892	-3.433	22.664	1.00	11.23
ATOM	6711	O	GLN	995	-7.992	-4.142	22.222	1.00	12.90
ATOM	6712	N	ALA	996	-10.170	-3.612	22.361	1.00	11.62
ATOM	6713	CA	ALA	996	-10.578	-4.647	21.422	1.00	10.29
ATOM	6714	CB	ALA	996	-12.103	-4.647	21.266	1.00	12.23
ATOM	6715	C	ALA	996	-9.917	-4.396	20.069	1.00	11.82
ATOM	6716	O	ALA	996	-9.402	-5.321	19.431	1.00	11.66
ATOM	6717	N	PHE	997	-9.933	-3.141	19.621	1.00	11.85
ATOM	6718	CA	PHE	997	-9.325	-2.808	18.327	1.00	13.01
ATOM	6719	CB	PHE	997	-9.423	-1.308	18.025	1.00	12.43
ATOM	6720	CG	PHE	997	-10.813	-0.747	18.100	1.00	12.02
ATOM	6721	CD1	PHE	997	-11.921	-1.528	17.811	1.00	14.72
ATOM	6722	CD2	PHE	997	-11.001	0.588	18.443	1.00	15.95
ATOM	6723	CE1	PHE	997	-13.209	-0.992	17.865	1.00	16.49
ATOM	6724	CE2	PHE	997	-12.279	1.140	18.499	1.00	13.96
ATOM	6725	CZ	PHE	997	-13.379	0.344	18.211	1.00	17.62
ATOM	6726	C	PHE	997	-7.846	-3.179	18.300	1.00	13.37
ATOM	6727	O	PHE	997	-7.364	-3.784	17.343	1.00	13.24

ATOM	6728	N	GLU	998	-7.128	-2.779	19.341	1.00	13.15
ATOM	6729	CA	GLU	998	-5.701	-3.054	19.430	1.00	15.16
ATOM	6730	CB	GLU	998	-5.123	-2.380	20.674	1.00	17.72
ATOM	6731	CG	GLU	998	-3.669	-2.700	20.952	1.00	24.55
ATOM	6732	CD	GLU	998	-2.709	-1.972	20.023	1.00	28.59
ATOM	6733	OE1	GLU	998	-3.168	-1.301	19.068	1.00	30.41
ATOM	6734	OE2	GLU	998	-1.486	-2.077	20.254	1.00	31.76
ATOM	6735	C	GLU	998	-5.389	-4.554	19.461	1.00	12.56
ATOM	6736	O	GLU	998	-4.523	-5.029	18.730	1.00	10.73
ATOM	6737	N	ASN	999	-6.093	-5.303	20.301	1.00	12.22
ATOM	6738	CA	ASN	999	-5.833	-6.729	20.393	1.00	12.09
ATOM	6739	CB	ASN	999	-6.429	-7.280	21.694	1.00	11.99
ATOM	6740	CG	ASN	999	-5.719	-6.735	22.912	1.00	14.10
ATOM	6741	OD1	ASN	999	-4.503	-6.514	22.869	1.00	13.95
ATOM	6742	ND2	ASN	999	-6.456	-6.520	24.010	1.00	13.68
ATOM	6743	C	ASN	999	-6.304	-7.523	19.182	1.00	12.22
ATOM	6744	O	ASN	999	-5.667	-8.504	18.775	1.00	10.24
ATOM	6745	N	ALA	1000	-7.411	-7.101	18.589	1.00	11.49
ATOM	6746	CA	ALA	1000	-7.912	-7.777	17.399	1.00	12.27
ATOM	6747	CB	ALA	1000	-9.280	-7.201	16.998	1.00	11.29
ATOM	6748	C	ALA	1000	-6.894	-7.571	16.265	1.00	12.84
ATOM	6749	O	ALA	1000	-6.617	-8.488	15.493	1.00	11.51
ATOM	6750	N	ALA	1001	-6.325	-6.371	16.174	1.00	12.62
ATOM	6751	CA	ALA	1001	-5.340	-6.094	15.128	1.00	12.98
ATOM	6752	CB	ALA	1001	-4.941	-4.619	15.165	1.00	11.69
ATOM	6753	C	ALA	1001	-4.107	-6.978	15.300	1.00	11.52
ATOM	6754	O	ALA	1001	-3.545	-7.477	14.324	1.00	11.98
ATOM	6755	N	THR	1002	-3.681	-7.165	16.542	1.00	10.66
ATOM	6756	CA	THR	1002	-2.515	-8.007	16.804	1.00	11.02
ATOM	6757	CB	THR	1002	-2.228	-8.117	18.319	1.00	11.27
ATOM	6758	OG1	THR	1002	-1.930	-6.813	18.841	1.00	12.88
ATOM	6759	CG2	THR	1002	-1.036	-9.040	18.584	1.00	11.56
ATOM	6760	C	THR	1002	-2.739	-9.411	16.246	1.00	10.94
ATOM	6761	O	THR	1002	-1.897	-9.952	15.523	1.00	11.20
ATOM	6762	N	VAL	1003	-3.881	-10.005	16.563	1.00	9.24
ATOM	6763	CA	VAL	1003	-4.154	-11.372	16.102	1.00	9.83
ATOM	6764	CB	VAL	1003	-5.342	-11.991	16.897	1.00	11.74
ATOM	6765	CG1	VAL	1003	-6.680	-11.511	16.373	1.00	10.79
ATOM	6766	CG2	VAL	1003	-5.231	-13.484	16.875	1.00	19.69
ATOM	6767	C	VAL	1003	-4.374	-11.466	14.593	1.00	10.01
ATOM	6768	O	VAL	1003	-3.999	-12.462	13.965	1.00	7.78
ATOM	6769	N	MET	1004	-4.967	-10.423	14.013	1.00	8.67
ATOM	6770	CA	MET	1004	-5.205	-10.368	12.570	1.00	11.82
ATOM	6771	CB	MET	1004	-6.107	-9.174	12.213	1.00	11.14
ATOM	6772	CG	MET	1004	-7.523	-9.240	12.728	1.00	16.34
ATOM	6773	SD	MET	1004	-8.546	-10.464	11.934	1.00	19.40
ATOM	6774	CE	MET	1004	-8.653	-9.772	10.242	1.00	17.67
ATOM	6775	C	MET	1004	-3.878	-10.211	11.825	1.00	10.89
ATOM	6776	O	MET	1004	-3.665	-10.860	10.807	1.00	13.67
ATOM	6777	N	ARG	1005	-2.988	-9.345	12.311	1.00	11.14
ATOM	6778	CA	ARG	1005	-1.708	-9.184	11.619	1.00	11.02
ATOM	6779	CB	ARG	1005	-0.862	-8.066	12.234	1.00	12.00
ATOM	6780	CG	ARG	1005	-1.490	-6.689	12.114	1.00	16.37
ATOM	6781	CD	ARG	1005	-0.472	-5.584	12.356	1.00	15.62
ATOM	6782	NE	ARG	1005	-1.134	-4.292	12.558	1.00	17.19
ATOM	6783	CZ	ARG	1005	-1.491	-3.811	13.744	1.00	16.30
ATOM	6784	NH1	ARG	1005	-1.248	-4.501	14.854	1.00	16.09
ATOM	6785	NH2	ARG	1005	-2.110	-2.646	13.818	1.00	17.74
ATOM	6786	C	ARG	1005	-0.916	-10.491	11.659	1.00	11.70
ATOM	6787	O	ARG	1005	-0.139	-10.787	10.750	1.00	11.26
ATOM	6788	N	ALA	1006	-1.142	-11.266	12.716	1.00	11.42
ATOM	6789	CA	ALA	1006	-0.475	-12.540	12.918	1.00	11.69
ATOM	6790	CB	ALA	1006	-0.660	-12.996	14.363	1.00	12.29
ATOM	6791	C	ALA	1006	-0.955	-13.639	11.963	1.00	14.06
ATOM	6792	O	ALA	1006	-0.333	-14.703	11.864	1.00	13.17
ATOM	6793	N	GLY	1007	-2.068	-13.399	11.280	1.00	11.67
ATOM	6794	CA	GLY	1007	-2.558	-14.384	10.336	1.00	13.30
ATOM	6795	C	GLY	1007	-4.043	-14.701	10.358	1.00	11.83
ATOM	6796	O	GLY	1007	-4.546	-15.400	9.474	1.00	13.69
ATOM	6797	N	ALA	1008	-4.750	-14.183	11.354	1.00	10.96
ATOM	6798	CA	ALA	1008	-6.177	-14.430	11.484	1.00	10.68
ATOM	6799	CB	ALA	1008	-6.641	-14.059	12.894	1.00	11.65
ATOM	6800	C	ALA	1008	-7.010	-13.665	10.453	1.00	13.14
ATOM	6801	O	ALA	1008	-6.591	-12.624	9.951	1.00	14.60
ATOM	6802	N	ASN	1009	-8.193	-14.192	10.151	1.00	12.15
ATOM	6803	CA	ASN	1009	-9.115	-13.567	9.200	1.00	11.79
ATOM	6804	CB	ASN	1009	-9.652	-14.579	8.197	1.00	13.02

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ATOM   6805  CG   ASN  1009       -8.583 -15.225    7.376  1.00 13.44
ATOM   6806  OD1  ASN  1009       -7.839 -14.559    6.664  1.00 15.40
ATOM   6807  ND2  ASN  1009       -8.507 -16.550    7.457  1.00 10.54
ATOM   6808  C    ASN  1009      -10.327 -13.057    9.954  1.00 11.95
ATOM   6809  O    ASN  1009      -11.119 -12.276    9.429  1.00 11.36
ATOM   6810  N    MET  1010      -10.493 -13.536   11.177  1.00 11.61
ATOM   6811  CA   MET  1010      -11.660 -13.165   11.956  1.00 12.67
ATOM   6812  CB   MET  1010      -12.824 -14.052   11.513  1.00 10.94
ATOM   6813  CG   MET  1010      -14.101 -13.892   12.297  1.00 16.45
ATOM   6814  SD   MET  1010      -15.423 -14.958   11.623  1.00 18.40
ATOM   6815  CE   MET  1010      -16.334 -13.742   10.618  1.00 17.91
ATOM   6816  C    MET  1010      -11.357 -13.364   13.431  1.00 12.79
ATOM   6817  O    MET  1010      -10.541 -14.207   13.792  1.00 10.90
ATOM   6818  N    VAL  1011      -12.005 -12.571   14.276  1.00 11.92
ATOM   6819  CA   VAL  1011      -11.787 -12.664   15.701  1.00 12.96
ATOM   6820  CB   VAL  1011      -11.327 -11.300   16.246  1.00 14.64
ATOM   6821  CG1  VAL  1011      -11.267 -11.331   17.739  1.00 21.61
ATOM   6822  CG2  VAL  1011       -9.950 -10.951   15.668  1.00 14.08
ATOM   6823  C    VAL  1011      -13.064 -13.121   16.397  1.00 11.60
ATOM   6824  O    VAL  1011      -14.165 -12.769   15.978  1.00 11.44
ATOM   6825  N    LYS  1012      -12.924 -13.940   17.436  1.00 11.24
ATOM   6826  CA   LYS  1012      -14.088 -14.399   18.187  1.00 10.46
ATOM   6827  CB   LYS  1012      -14.130 -15.928   18.292  1.00 12.52
ATOM   6828  CG   LYS  1012      -15.317 -16.422   19.124  1.00 14.74
ATOM   6829  CD   LYS  1012      -15.735 -17.857   18.795  1.00 15.78
ATOM   6830  CE   LYS  1012      -14.687 -18.869   19.223  1.00 14.61
ATOM   6831  NZ   LYS  1012      -14.548 -18.899   20.722  1.00 13.04
ATOM   6832  C    LYS  1012      -14.050 -13.810   19.590  1.00 11.96
ATOM   6833  O    LYS  1012      -13.015 -13.831   20.261  1.00 13.92
ATOM   6834  N    ILE  1013      -15.186 -13.280   20.028  1.00 12.31
ATOM   6835  CA   ILE  1013      -15.292 -12.693   21.357  1.00 13.37
ATOM   6836  CB   ILE  1013      -15.325 -11.149   21.278  1.00 13.64
ATOM   6837  CG2  ILE  1013      -13.959 -10.625   20.802  1.00 13.46
ATOM   6838  CG1  ILE  1013      -16.419 -10.690   20.313  1.00 14.17
ATOM   6839  CD1  ILE  1013      -16.605  -9.181   20.299  1.00 16.29
ATOM   6840  C    ILE  1013      -16.540 -13.213   22.062  1.00 14.88
ATOM   6841  O    ILE  1013      -17.538 -13.525   21.414  1.00 14.92
ATOM   6842  N    GLU  1014      -16.475 -13.304   23.388  1.00 14.84
ATOM   6843  CA   GLU  1014      -17.581 -13.814   24.199  1.00 17.49
ATOM   6844  CB   GLU  1014      -17.039 -14.690   25.334  1.00 14.94
ATOM   6845  CG   GLU  1014      -16.318 -15.943   24.884  1.00 18.47
ATOM   6846  CD   GLU  1014      -15.753 -16.757   26.052  1.00 18.83
ATOM   6847  OE1  GLU  1014      -16.166 -16.532   27.205  1.00 20.52
ATOM   6848  OE2  GLU  1014      -14.900 -17.629   25.811  1.00 20.24
ATOM   6849  C    GLU  1014      -18.441 -12.722   24.818  1.00 17.91
ATOM   6850  O    GLU  1014      -17.928 -11.775   25.410  1.00 18.79
ATOM   6851  N    GLY  1015      -19.755 -12.862   24.704  1.00 19.87
ATOM   6852  CA   GLY  1015      -20.623 -11.864   25.292  1.00 20.15
ATOM   6853  C    GLY  1015      -21.824 -11.530   24.445  1.00 22.90
ATOM   6854  O    GLY  1015      -21.869 -11.843   23.254  1.00 22.51
ATOM   6855  N    GLY  1016      -22.802 -10.879   25.064  1.00 23.73
ATOM   6856  CA   GLY  1016      -24.010 -10.523   24.345  1.00 24.26
ATOM   6857  C    GLY  1016      -24.190  -9.048   24.052  1.00 24.54
ATOM   6858  O    GLY  1016      -23.329  -8.408   23.448  1.00 23.49
ATOM   6859  N    GLU  1017      -25.329  -8.518   24.486  1.00 24.54
ATOM   6860  CA   GLU  1017      -25.685  -7.118   24.273  1.00 25.84
ATOM   6861  CB   GLU  1017      -26.866  -6.730   25.170  1.00 29.29
ATOM   6862  CG   GLU  1017      -28.235  -6.870   24.538  1.00 37.68
ATOM   6863  CD   GLU  1017      -28.601  -5.692   23.644  1.00 39.61
ATOM   6864  OE1  GLU  1017      -27.961  -5.504   22.590  1.00 39.67
ATOM   6865  OE2  GLU  1017      -29.533  -4.943   24.012  1.00 43.46
ATOM   6866  C    GLU  1017      -24.565  -6.113   24.499  1.00 22.37
ATOM   6867  O    GLU  1017      -24.354  -5.229   23.673  1.00 20.28
ATOM   6868  N    TRP  1018      -23.857  -6.240   25.617  1.00 21.77
ATOM   6869  CA   TRP  1018      -22.794  -5.295   25.939  1.00 20.32
ATOM   6870  CB   TRP  1018      -22.173  -5.621   27.309  1.00 20.17
ATOM   6871  CG   TRP  1018      -21.268  -6.820   27.342  1.00 18.75
ATOM   6872  CD2  TRP  1018      -19.835  -6.807   27.366  1.00 18.11
ATOM   6873  CE2  TRP  1018      -19.405  -8.151   27.412  1.00 18.06
ATOM   6874  CE3  TRP  1018      -18.872  -5.790   27.350  1.00 16.22
ATOM   6875  CD1  TRP  1018      -21.640  -8.129   27.373  1.00 20.49
ATOM   6876  NE1  TRP  1018      -20.527  -8.938   27.420  1.00 20.28
ATOM   6877  CZ2  TRP  1018      -18.049  -8.506   27.446  1.00 18.14
ATOM   6878  CZ3  TRP  1018      -17.523  -6.146   27.384  1.00 17.33
ATOM   6879  CH2  TRP  1018      -17.129  -7.495   27.430  1.00 16.12
ATOM   6880  C    TRP  1018      -21.692  -5.171   24.896  1.00 18.60
ATOM   6881  O    TRP  1018      -20.943  -4.193   24.901  1.00 20.29
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ATOM   6882  N   LEU  1019    -21.612  -6.143  23.992  1.00 17.89
ATOM   6883  CA  LEU  1019    -20.591  -6.150  22.942  1.00 18.29
ATOM   6884  CB  LEU  1019    -20.134  -7.581  22.671  1.00 18.15
ATOM   6885  CG  LEU  1019    -19.257  -8.224  23.742  1.00 18.92
ATOM   6886  CD1 LEU  1019    -18.970  -9.657  23.341  1.00 18.85
ATOM   6887  CD2 LEU  1019    -17.969  -7.431  23.886  1.00 17.98
ATOM   6888  C   LEU  1019    -21.024  -5.538  21.613  1.00 19.71
ATOM   6889  O   LEU  1019    -20.206  -5.395  20.707  1.00 18.84
ATOM   6890  N   VAL  1020    -22.301  -5.190  21.496  1.00 19.00
ATOM   6891  CA  VAL  1020    -22.833  -4.612  20.272  1.00 19.17
ATOM   6892  CB  VAL  1020    -24.281  -4.105  20.489  1.00 20.01
ATOM   6893  CG1 VAL  1020    -24.714  -3.204  19.347  1.00 18.49
ATOM   6894  CG2 VAL  1020    -25.224  -5.301  20.579  1.00 19.83
ATOM   6895  C   VAL  1020    -21.987  -3.478  19.708  1.00 20.01
ATOM   6896  O   VAL  1020    -21.596  -3.505  18.540  1.00 20.16
ATOM   6897  N   GLU  1021    -21.697  -2.486  20.539  1.00 20.60
ATOM   6898  CA  GLU  1021    -20.899  -1.351  20.107  1.00 21.01
ATOM   6899  CB  GLU  1021    -20.744  -0.355  21.254  1.00 26.20
ATOM   6900  CG  GLU  1021    -19.763   0.761  20.952  1.00 30.81
ATOM   6901  CD  GLU  1021    -19.791   1.857  21.994  1.00 35.68
ATOM   6902  OE1 GLU  1021    -19.602   1.551  23.193  1.00 38.35
ATOM   6903  OE2 GLU  1021    -20.002   3.026  21.606  1.00 38.75
ATOM   6904  C   GLU  1021    -19.523  -1.772  19.606  1.00 19.64
ATOM   6905  O   GLU  1021    -19.062  -1.327  18.555  1.00 18.56
ATOM   6906  N   THR  1022    -18.862  -2.624  20.375  1.00 18.69
ATOM   6907  CA  THR  1022    -17.539  -3.107  20.010  1.00 17.98
ATOM   6908  CB  THR  1022    -17.001  -4.052  21.103  1.00 18.81
ATOM   6909  OG1 THR  1022    -16.885  -3.323  22.329  1.00 16.49
ATOM   6910  CG2 THR  1022    -15.633  -4.606  20.721  1.00 17.33
ATOM   6911  C   THR  1022    -17.575  -3.831  18.664  1.00 17.26
ATOM   6912  O   THR  1022    -16.707  -3.630  17.808  1.00 18.36
ATOM   6913  N   VAL  1023    -18.588  -4.670  18.478  1.00 17.37
ATOM   6914  CA  VAL  1023    -18.742  -5.415  17.232  1.00 16.94
ATOM   6915  CB  VAL  1023    -19.918  -6.402  17.317  1.00 16.32
ATOM   6916  CG1 VAL  1023    -20.170  -7.033  15.937  1.00 19.55
ATOM   6917  CG2 VAL  1023    -19.606  -7.484  18.338  1.00 17.66
ATOM   6918  C   VAL  1023    -18.972  -4.484  16.048  1.00 18.30
ATOM   6919  O   VAL  1023    -18.386  -4.666  14.976  1.00 16.65
ATOM   6920  N   GLN  1024    -19.828  -3.488  16.242  1.00 18.44
ATOM   6921  CA  GLN  1024    -20.125  -2.540  15.169  1.00 20.28
ATOM   6922  CB  GLN  1024    -21.152  -1.498  15.631  1.00 22.35
ATOM   6923  CG  GLN  1024    -22.494  -2.088  16.057  1.00 28.92
ATOM   6924  CD  GLN  1024    -23.512  -1.029  16.479  1.00 31.59
ATOM   6925  OE1 GLN  1024    -23.238  -0.195  17.349  1.00 32.26
ATOM   6926  NE2 GLN  1024    -24.700  -1.069  15.871  1.00 31.37
ATOM   6927  C   GLN  1024    -18.841  -1.840  14.740  1.00 18.28
ATOM   6928  O   GLN  1024    -18.519  -1.791  13.554  1.00 19.29
ATOM   6929  N   MET  1025    -18.104  -1.319  15.717  1.00 16.21
ATOM   6930  CA  MET  1025    -16.866  -0.608  15.445  1.00 16.11
ATOM   6931  CB  MET  1025    -16.388   0.105  16.716  1.00 17.05
ATOM   6932  CG  MET  1025    -17.392   1.124  17.243  1.00 19.13
ATOM   6933  SD  MET  1025    -16.834   1.990  18.708  1.00 22.52
ATOM   6934  CE  MET  1025    -15.842   3.246  17.969  1.00 20.06
ATOM   6935  C   MET  1025    -15.761  -1.493  14.871  1.00 15.89
ATOM   6936  O   MET  1025    -15.026  -1.070  13.978  1.00 15.39
ATOM   6937  N   LEU  1026    -15.630  -2.719  15.374  1.00 15.63
ATOM   6938  CA  LEU  1026    -14.602  -3.614  14.852  1.00 14.77
ATOM   6939  CB  LEU  1026    -14.660  -4.970  15.563  1.00 13.09
ATOM   6940  CG  LEU  1026    -13.841  -4.992  16.852  1.00 12.23
ATOM   6941  CD1 LEU  1026    -14.160  -6.247  17.654  1.00 10.28
ATOM   6942  CD2 LEU  1026    -12.354  -4.920  16.493  1.00  9.62
ATOM   6943  C   LEU  1026    -14.771  -3.821  13.353  1.00 15.22
ATOM   6944  O   LEU  1026    -13.810  -3.709  12.588  1.00 13.79
ATOM   6945  N   THR  1027    -16.003  -4.115  12.947  1.00 18.88
ATOM   6946  CA  THR  1027    -16.337  -4.344  11.544  1.00 23.03
ATOM   6947  CB  THR  1027    -17.863  -4.600  11.369  1.00 25.20
ATOM   6948  OG1 THR  1027    -18.251  -5.736  12.150  1.00 29.61
ATOM   6949  CG2 THR  1027    -18.198  -4.884   9.905  1.00 30.36
ATOM   6950  C   THR  1027    -15.923  -3.177  10.645  1.00 23.34
ATOM   6951  O   THR  1027    -15.251  -3.378   9.630  1.00 21.92
ATOM   6952  N   GLU  1028    -16.315  -1.957  11.005  1.00 23.53
ATOM   6953  CA  GLU  1028    -15.945  -0.807  10.181  1.00 24.72
ATOM   6954  CB  GLU  1028    -16.678   0.466  10.643  1.00 27.14
ATOM   6955  CG  GLU  1028    -17.060   0.487  12.105  1.00 28.12
ATOM   6956  CD  GLU  1028    -17.832   1.740  12.511  1.00 25.37
ATOM   6957  OE1 GLU  1028    -18.914   2.007  11.949  1.00 26.88
ATOM   6958  OE2 GLU  1028    -17.362   2.462  13.408  1.00 24.11
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ATOM   6959  C    GLU  1028    -14.433  -0.597  10.173  1.00 24.26
ATOM   6960  O    GLU  1028    -13.895   0.084   9.299  1.00 24.65
ATOM   6961  N    ARG  1029    -13.740  -1.196  11.137  1.00 21.79
ATOM   6962  CA   ARG  1029    -12.295  -1.075  11.178  1.00 19.58
ATOM   6963  CB   ARG  1029    -11.830  -0.831  12.613  1.00 18.96
ATOM   6964  CG   ARG  1029    -12.242   0.557  13.083  1.00 20.16
ATOM   6965  CD   ARG  1029    -12.178   0.735  14.577  1.00 16.37
ATOM   6966  NE   ARG  1029    -12.643   2.075  14.944  1.00 18.38
ATOM   6967  CZ   ARG  1029    -13.881   2.524  14.749  1.00 15.81
ATOM   6968  NH1  ARG  1029    -14.800   1.745  14.192  1.00 15.80
ATOM   6969  NH2  ARG  1029    -14.202   3.762  15.104  1.00 17.73
ATOM   6970  C    ARG  1029    -11.613  -2.290  10.548  1.00 18.96
ATOM   6971  O    ARG  1029    -10.479  -2.628  10.882  1.00 18.45
ATOM   6972  N    ALA  1030    -12.341  -2.939   9.638  1.00 18.34
ATOM   6973  CA   ALA  1030    -11.849  -4.081   8.869  1.00 16.44
ATOM   6974  CB   ALA  1030    -10.532  -3.702   8.187  1.00 17.45
ATOM   6975  C    ALA  1030    -11.683  -5.404   9.599  1.00 15.43
ATOM   6976  O    ALA  1030    -11.004  -6.292   9.094  1.00 15.15
ATOM   6977  N    VAL  1031    -12.305  -5.544  10.766  1.00 14.41
ATOM   6978  CA   VAL  1031    -12.205  -6.783  11.529  1.00 14.99
ATOM   6979  CB   VAL  1031    -11.741  -6.513  12.990  1.00 15.55
ATOM   6980  CG1  VAL  1031    -11.730  -7.811  13.792  1.00 15.39
ATOM   6981  CG2  VAL  1031    -10.351  -5.899  12.988  1.00 16.52
ATOM   6982  C    VAL  1031    -13.523  -7.548  11.587  1.00 14.09
ATOM   6983  O    VAL  1031    -14.499  -7.074  12.175  1.00 14.29
ATOM   6984  N    PRO  1032    -13.581  -8.726  10.941  1.00 13.45
ATOM   6985  CD   PRO  1032    -12.645  -9.221   9.920  1.00 14.69
ATOM   6986  CA   PRO  1032    -14.806  -9.532  10.965  1.00 13.56
ATOM   6987  CB   PRO  1032    -14.605 -10.534   9.827  1.00 13.39
ATOM   6988  CG   PRO  1032    -13.133 -10.622   9.698  1.00 19.95
ATOM   6989  C    PRO  1032    -14.872 -10.187  12.337  1.00 13.75
ATOM   6990  O    PRO  1032    -13.850 -10.572  12.905  1.00 14.39
ATOM   6991  N    VAL  1033    -16.077 -10.298  12.870  1.00 13.91
ATOM   6992  CA   VAL  1033    -16.265 -10.846  14.200  1.00 13.00
ATOM   6993  CB   VAL  1033    -16.871  -9.776  15.137  1.00 13.98
ATOM   6994  CG1  VAL  1033    -17.112 -10.343  16.534  1.00 12.93
ATOM   6995  CG2  VAL  1033    -15.968  -8.566  15.189  1.00 12.31
ATOM   6996  C    VAL  1033    -17.175 -12.047  14.239  1.00 14.20
ATOM   6997  O    VAL  1033    -18.219 -12.078  13.580  1.00 13.95
ATOM   6998  N    CYS  1034    -16.768 -13.040  15.019  1.00 12.45
ATOM   6999  CA   CYS  1034    -17.577 -14.232  15.222  1.00 14.01
ATOM   7000  CB   CYS  1034    -16.739 -15.504  15.078  1.00 12.96
ATOM   7001  SG   CYS  1034    -17.660 -17.005  15.555  1.00 15.25
ATOM   7002  C    CYS  1034    -18.057 -14.097  16.661  1.00 13.22
ATOM   7003  O    CYS  1034    -17.251 -13.898  17.569  1.00 12.90
ATOM   7004  N    GLY  1035    -19.370 -14.176  16.850  1.00 13.48
ATOM   7005  CA   GLY  1035    -19.940 -14.071  18.172  1.00 15.44
ATOM   7006  C    GLY  1035    -19.826 -15.397  18.897  1.00 15.74
ATOM   7007  O    GLY  1035    -19.491 -16.422  18.294  1.00 16.26
ATOM   7008  N    HIS  1036    -20.107 -15.372  20.196  1.00 15.37
ATOM   7009  CA   HIS  1036    -20.027 -16.560  21.030  1.00 15.58
ATOM   7010  CB   HIS  1036    -18.582 -16.744  21.507  1.00 16.13
ATOM   7011  CG   HIS  1036    -18.335 -18.021  22.246  1.00 17.83
ATOM   7012  CD2  HIS  1036    -19.187 -18.943  22.755  1.00 19.01
ATOM   7013  ND1  HIS  1036    -17.065 -18.479  22.525  1.00 18.18
ATOM   7014  CE1  HIS  1036    -17.145 -19.629  23.171  1.00 20.16
ATOM   7015  NE2  HIS  1036    -18.422 -19.933  23.324  1.00 18.10
ATOM   7016  C    HIS  1036    -20.971 -16.397  22.223  1.00 15.56
ATOM   7017  O    HIS  1036    -20.705 -15.616  23.135  1.00 14.91
ATOM   7018  N    LEU  1037    -22.072 -17.139  22.201  1.00 14.85
ATOM   7019  CA   LEU  1037    -23.079 -17.075  23.254  1.00 19.01
ATOM   7020  CB   LEU  1037    -24.404 -16.551  22.685  1.00 19.62
ATOM   7021  CG   LEU  1037    -24.384 -15.141  22.079  1.00 20.40
ATOM   7022  CD1  LEU  1037    -25.681 -14.870  21.323  1.00 21.01
ATOM   7023  CD2  LEU  1037    -24.184 -14.127  23.196  1.00 22.34
ATOM   7024  C    LEU  1037    -23.327 -18.434  23.884  1.00 20.82
ATOM   7025  O    LEU  1037    -22.970 -19.475  23.320  1.00 20.02
ATOM   7026  N    GLY  1038    -23.967 -18.410  25.048  1.00 22.55
ATOM   7027  CA   GLY  1038    -24.271 -19.637  25.764  1.00 25.04
ATOM   7028  C    GLY  1038    -23.304 -19.816  26.909  1.00 26.30
ATOM   7029  O    GLY  1038    -23.171 -18.944  27.767  1.00 27.66
ATOM   7030  N    LEU  1039    -22.619 -20.951  26.925  1.00 28.14
ATOM   7031  CA   LEU  1039    -21.655 -21.221  27.976  1.00 29.16
ATOM   7032  CB   LEU  1039    -21.525 -22.736  28.173  1.00 31.16
ATOM   7033  CG   LEU  1039    -20.968 -23.253  29.503  1.00 33.32
ATOM   7034  CD1  LEU  1039    -21.160 -24.764  29.570  1.00 35.58
ATOM   7035  CD2  LEU  1039    -19.503 -22.891  29.641  1.00 34.73
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ATOM    7036  C    LEU  1039     -20.310 -20.600  27.580  1.00 28.75
ATOM    7037  O    LEU  1039     -19.542 -21.188  26.820  1.00 30.49
ATOM    7038  N    THR  1040     -20.049 -19.397  28.085  1.00 29.32
ATOM    7039  CA   THR  1040     -18.806 -18.677  27.806  1.00 29.10
ATOM    7040  CB   THR  1040     -19.043 -17.147  27.758  1.00 30.20
ATOM    7041  OG1  THR  1040     -19.892 -16.753  28.844  1.00 29.44
ATOM    7042  CG2  THR  1040     -19.688 -16.746  26.445  1.00 32.08
ATOM    7043  C    THR  1040     -17.781 -18.999  28.893  1.00 28.48
ATOM    7044  O    THR  1040     -17.808 -18.420  29.980  1.00 29.20
ATOM    7045  N    PRO  1041     -16.850 -19.920  28.597  1.00 28.41
ATOM    7046  CD   PRO  1041     -16.620 -20.464  27.246  1.00 28.58
ATOM    7047  CA   PRO  1041     -15.797 -20.363  29.518  1.00 27.50
ATOM    7048  CB   PRO  1041     -14.949 -21.298  28.652  1.00 28.87
ATOM    7049  CG   PRO  1041     -15.152 -20.773  27.279  1.00 32.35
ATOM    7050  C    PRO  1041     -14.972 -19.275  30.206  1.00 26.35
ATOM    7051  O    PRO  1041     -14.484 -19.479  31.320  1.00 24.47
ATOM    7052  N    GLN  1042     -14.802 -18.126  29.558  1.00 23.87
ATOM    7053  CA   GLN  1042     -14.043 -17.050  30.188  1.00 23.26
ATOM    7054  CB   GLN  1042     -13.872 -15.868  29.223  1.00 22.94
ATOM    7055  CG   GLN  1042     -12.682 -16.011  28.273  1.00 19.12
ATOM    7056  CD   GLN  1042     -12.640 -14.915  27.228  1.00 22.27
ATOM    7057  OE1  GLN  1042     -13.082 -13.792  27.478  1.00 21.44
ATOM    7058  NE2  GLN  1042     -12.098 -15.231  26.049  1.00 19.01
ATOM    7059  C    GLN  1042     -14.737 -16.597  31.475  1.00 22.74
ATOM    7060  O    GLN  1042     -14.084 -16.144  32.410  1.00 22.65
ATOM    7061  N    SER  1043     -16.059 -16.739  31.532  1.00 24.41
ATOM    7062  CA   SER  1043     -16.809 -16.339  32.723  1.00 24.75
ATOM    7063  CB   SER  1043     -18.185 -15.799  32.326  1.00 26.59
ATOM    7064  OG   SER  1043     -18.069 -14.611  31.563  1.00 29.05
ATOM    7065  C    SER  1043     -16.981 -17.493  33.710  1.00 24.52
ATOM    7066  O    SER  1043     -17.845 -17.440  34.581  1.00 25.87
ATOM    7067  N    VAL  1044     -16.149 -18.524  33.578  1.00 23.32
ATOM    7068  CA   VAL  1044     -16.227 -19.695  34.454  1.00 22.51
ATOM    7069  CB   VAL  1044     -15.004 -20.632  34.249  1.00 23.18
ATOM    7070  CG1  VAL  1044     -13.718 -19.911  34.614  1.00 22.95
ATOM    7071  CG2  VAL  1044     -15.166 -21.895  35.084  1.00 22.94
ATOM    7072  C    VAL  1044     -16.338 -19.326  35.933  1.00 22.48
ATOM    7073  O    VAL  1044     -17.060 -19.982  36.682  1.00 23.24
ATOM    7074  N    ASN  1045     -15.626 -18.287  36.360  1.00 22.59
ATOM    7075  CA   ASN  1045     -15.685 -17.879  37.761  1.00 24.64
ATOM    7076  CB   ASN  1045     -14.546 -16.911  38.091  1.00 23.05
ATOM    7077  CG   ASN  1045     -13.187 -17.545  37.913  1.00 21.46
ATOM    7078  OD1  ASN  1045     -12.806 -18.447  38.666  1.00 20.69
ATOM    7079  ND2  ASN  1045     -12.453 -17.096  36.904  1.00 20.14
ATOM    7080  C    ASN  1045     -17.019 -17.237  38.107  1.00 25.96
ATOM    7081  O    ASN  1045     -17.458 -17.289  39.257  1.00 26.58
ATOM    7082  N    ILE  1046     -17.666 -16.633  37.115  1.00 28.57
ATOM    7083  CA   ILE  1046     -18.962 -15.997  37.342  1.00 30.78
ATOM    7084  CB   ILE  1046     -19.397 -15.116  36.141  1.00 30.35
ATOM    7085  CG2  ILE  1046     -20.822 -14.616  36.356  1.00 29.76
ATOM    7086  CG1  ILE  1046     -18.440 -13.933  35.970  1.00 29.93
ATOM    7087  CD1  ILE  1046     -18.419 -12.976  37.145  1.00 28.61
ATOM    7088  C    ILE  1046     -20.023 -17.067  37.551  1.00 32.86
ATOM    7089  O    ILE  1046     -20.841 -16.971  38.466  1.00 32.88
ATOM    7090  N    PHE  1047     -20.008 -18.084  36.693  1.00 35.65
ATOM    7091  CA   PHE  1047     -20.977 -19.174  36.783  1.00 39.34
ATOM    7092  CB   PHE  1047     -21.125 -19.878  35.430  1.00 40.96
ATOM    7093  CG   PHE  1047     -21.373 -18.946  34.277  1.00 43.16
ATOM    7094  CD1  PHE  1047     -22.418 -18.029  34.313  1.00 45.03
ATOM    7095  CD2  PHE  1047     -20.570 -19.003  33.141  1.00 44.64
ATOM    7096  CE1  PHE  1047     -22.660 -17.177  33.234  1.00 45.71
ATOM    7097  CE2  PHE  1047     -20.803 -18.157  32.057  1.00 45.87
ATOM    7098  CZ   PHE  1047     -21.851 -17.243  32.104  1.00 46.15
ATOM    7099  C    PHE  1047     -20.559 -20.204  37.829  1.00 40.40
ATOM    7100  O    PHE  1047     -21.384 -20.982  38.309  1.00 40.84
ATOM    7101  N    GLY  1048     -19.275 -20.208  38.174  1.00 40.74
ATOM    7102  CA   GLY  1048     -18.780 -21.157  39.153  1.00 41.82
ATOM    7103  C    GLY  1048     -18.688 -22.550  38.561  1.00 43.00
ATOM    7104  O    GLY  1048     -18.995 -23.546  39.220  1.00 42.75
ATOM    7105  N    GLY  1049     -18.262 -22.617  37.306  1.00 43.62
ATOM    7106  CA   GLY  1049     -18.140 -23.893  36.629  1.00 45.01
ATOM    7107  C    GLY  1049     -18.709 -23.799  35.229  1.00 46.15
ATOM    7108  O    GLY  1049     -19.129 -22.723  34.800  1.00 45.08
ATOM    7109  N    TYR  1050     -18.725 -24.919  34.513  1.00 47.77
ATOM    7110  CA   TYR  1050     -19.255 -24.940  33.156  1.00 49.51
ATOM    7111  CB   TYR  1050     -18.312 -25.707  32.227  1.00 49.59
ATOM    7112  CG   TYR  1050     -16.897 -25.181  32.246  1.00 49.48
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ATOM    7113  CD1 TYR  1050     -15.963 -25.674  33.153  1.00 49.47
ATOM    7114  CE1 TYR  1050     -14.669 -25.170  33.196  1.00 50.01
ATOM    7115  CD2 TYR  1050     -16.499 -24.166  31.376  1.00 49.76
ATOM    7116  CE2 TYR  1050     -15.207 -23.652  31.411  1.00 49.86
ATOM    7117  CZ  TYR  1050     -14.298 -24.159  32.323  1.00 50.33
ATOM    7118  OH  TYR  1050     -13.019 -23.657  32.370  1.00 50.67
ATOM    7119  C   TYR  1050     -20.635 -25.576  33.136  1.00 50.55
ATOM    7120  O   TYR  1050     -20.778 -26.770  32.876  1.00 50.84
ATOM    7121  N   LYS  1051     -21.648 -24.760  33.412  1.00 51.54
ATOM    7122  CA  LYS  1051     -23.031 -25.218  33.444  1.00 52.63
ATOM    7123  CB  LYS  1051     -23.738 -24.620  34.662  1.00 53.67
ATOM    7124  CG  LYS  1051     -22.963 -24.790  35.960  1.00 55.80
ATOM    7125  CD  LYS  1051     -23.561 -23.961  37.087  1.00 56.82
ATOM    7126  CE  LYS  1051     -22.680 -24.006  38.328  1.00 57.73
ATOM    7127  NZ  LYS  1051     -23.192 -23.119  39.410  1.00 58.17
ATOM    7128  C   LYS  1051     -23.756 -24.804  32.165  1.00 52.42
ATOM    7129  O   LYS  1051     -23.359 -23.850  31.495  1.00 51.97
ATOM    7130  N   VAL  1052     -24.821 -25.526  31.832  1.00 52.32
ATOM    7131  CA  VAL  1052     -25.595 -25.237  30.632  1.00 52.55
ATOM    7132  CB  VAL  1052     -26.555 -26.397  30.299  1.00 51.86
ATOM    7133  CG1 VAL  1052     -27.330 -26.087  29.025  1.00 51.77
ATOM    7134  CG2 VAL  1052     -25.771 -27.688  30.147  1.00 51.56
ATOM    7135  C   VAL  1052     -26.414 -23.959  30.779  1.00 52.86
ATOM    7136  O   VAL  1052     -26.992 -23.698  31.834  1.00 52.72
ATOM    7137  N   GLN  1053     -26.449 -23.164  29.714  1.00 53.38
ATOM    7138  CA  GLN  1053     -27.207 -21.917  29.701  1.00 53.40
ATOM    7139  CB  GLN  1053     -26.328 -20.754  29.234  1.00 53.64
ATOM    7140  CG  GLN  1053     -25.598 -20.014  30.348  1.00 54.11
ATOM    7141  CD  GLN  1053.    -24.605 -20.884  31.081  1.00 53.82
ATOM    7142  OE1 GLN  1053     -23.756 -21.525  30.465  1.00 55.31
ATOM    7143  NE2 GLN  1053     -24.697 -20.904  32.406  1.00 53.40
ATOM    7144  C   GLN  1053     -28.410 -22.044  28.773  1.00 53.18
ATOM    7145  O   GLN  1053     -28.560 -23.043  28.070  1.00 52.32
ATOM    7146  N   GLY  1054     -29.261 -21.024  28.773  1.00 53.68
ATOM    7147  CA  GLY  1054     -30.440 -21.045  27.927  1.00 54.63
ATOM    7148  C   GLY  1054     -31.592 -21.795  28.567  1.00 55.39
ATOM    7149  O   GLY  1054     -32.719 -21.745  28.080  1.00 55.28
ATOM    7150  N   ARG  1055     -31.303 -22.495  29.660  1.00 56.01
ATOM    7151  CA  ARG  1055     -32.314 -23.255  30.382  1.00 57.40
ATOM    7152  CB  ARG  1055     -31.674 -24.003  31.556  1.00 59.12
ATOM    7153  CG  ARG  1055     -30.714 -25.123  31.166  1.00 61.02
ATOM    7154  CD  ARG  1055     -31.455 -26.328  30.604  1.00 62.44
ATOM    7155  NE  ARG  1055     -30.566 -27.459  30.347  1.00 63.71
ATOM    7156  CZ  ARG  1055     -29.867 -28.095  31.284  1.00 64.04
ATOM    7157  NH1 ARG  1055     -29.949 -27.713  32.551  1.00 64.28
ATOM    7158  NH2 ARG  1055     -29.086 -29.117  30.955  1.00 64.25
ATOM    7159  C   ARG  1055     -33.403 -22.325  30.911  1.00 57.48
ATOM    7160  O   ARG  1055     -33.223 -21.667  31.936  1.00 57.81
ATOM    7161  N   GLY  1056     -34.530 -22.268  30.208  1.00 57.14
ATOM    7162  CA  GLY  1056     -35.619 -21.414  30.643  1.00 56.84
ATOM    7163  C   GLY  1056     -36.179 -20.523  29.552  1.00 56.31
ATOM    7164  O   GLY  1056     -35.678 -20.507  28.427  1.00 55.89
ATOM    7165  N   ASP  1057     -37.224 -19.778  29.894  1.00 56.37
ATOM    7166  CA  ASP  1057     -37.869 -18.874  28.951  1.00 56.25
ATOM    7167  CB  ASP  1057     -39.315 -18.615  29.382  1.00 57.60
ATOM    7168  CG  ASP  1057     -40.138 -19.886  29.450  1.00 58.32
ATOM    7169  OD1 ASP  1057     -40.329 -20.525  28.394  1.00 58.27
ATOM    7170  OD2 ASP  1057     -40.589 -20.248  30.560  1.00 58.42
ATOM    7171  C   ASP  1057     -37.116 -17.552  28.868  1.00 55.73
ATOM    7172  O   ASP  1057     -36.656 -17.154  27.797  1.00 55.55
ATOM    7173  N   GLU  1058     -36.990 -16.878  30.005  1.00 54.61
ATOM    7174  CA  GLU  1058     -36.295 -15.600  30.059  1.00 53.66
ATOM    7175  CB  GLU  1058     -36.187 -15.125  31.510  1.00 54.74
ATOM    7176  CG  GLU  1058     -35.451 -13.809  31.680  1.00 56.54
ATOM    7177  CD  GLU  1058     -35.511 -13.289  33.103  1.00 57.81
ATOM    7178  OE1 GLU  1058     -36.616 -12.929  33.560  1.00 58.07
ATOM    7179  OE2 GLU  1058     -34.453 -13.247  33.767  1.00 58.77
ATOM    7180  C   GLU  1058     -34.906 -15.700  29.436  1.00 52.45
ATOM    7181  O   GLU  1058     -34.577 -14.950  28.515  1.00 52.76
ATOM    7182  N   ALA  1059     -34.095 -16.628  29.937  1.00 50.76
ATOM    7183  CA  ALA  1059     -32.741 -16.820  29.420  1.00 48.43
ATOM    7184  CB  ALA  1059     -31.995 -17.834  30.277  1.00 48.71
ATOM    7185  C   ALA  1059     -32.790 -17.290  27.969  1.00 46.48
ATOM    7186  O   ALA  1059     -31.947 -16.913  27.153  1.00 46.02
ATOM    7187  N   GLY  1060     -33.783 -18.116  27.658  1.00 44.48
ATOM    7188  CA  GLY  1060     -33.931 -18.618  26.307  1.00 42.19
ATOM    7189  C   GLY  1060     -34.145 -17.491  25.315  1.00 41.58
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ATOM   7190  O    GLY  1060    -33.539 -17.480  24.245  1.00 41.81
ATOM   7191  N    ASP  1061    -35.008 -16.540  25.667  1.00 40.06
ATOM   7192  CA   ASP  1061    -35.288 -15.401  24.797  1.00 38.77
ATOM   7193  CB   ASP  1061    -36.570 -14.686  25.236  1.00 39.86
ATOM   7194  CG   ASP  1061    -37.760 -15.616  25.318  1.00 39.94
ATOM   7195  OD1  ASP  1061    -38.037 -16.323  24.328  1.00 40.73
ATOM   7196  OD2  ASP  1061    -38.422 -15.634  26.375  1.00 41.22
ATOM   7197  C    ASP  1061    -34.131 -14.407  24.837  1.00 37.48
ATOM   7198  O    ASP  1061    -33.857 -13.719  23.854  1.00 37.88
ATOM   7199  N    GLN  1062    -33.464 -14.332  25.983  1.00 35.98
ATOM   7200  CA   GLN  1062    -32.337 -13.426  26.155  1.00 34.74
ATOM   7201  CB   GLN  1062    -31.807 -13.508  27.586  1.00 35.48
ATOM   7202  CG   GLN  1062    -30.679 -12.533  27.895  1.00 36.93
ATOM   7203  CD   GLN  1062    -31.115 -11.083  27.786  1.00 38.62
ATOM   7204  OE1  GLN  1062    -32.048 -10.653  28.465  1.00 38.65
ATOM   7205  NE2  GLN  1062    -30.439 -10.320  26.933  1.00 38.92
ATOM   7206  C    GLN  1062    -31.225 -13.777  25.173  1.00 33.19
ATOM   7207  O    GLN  1062    -30.671 -12.899  24.512  1.00 31.37
ATOM   7208  N    LEU  1063    -30.904 -15.064  25.082  1.00 32.49
ATOM   7209  CA   LEU  1063    -29.861 -15.531  24.176  1.00 31.76
ATOM   7210  CB   LEU  1063    -29.584 -17.025  24.405  1.00 32.31
ATOM   7211  CG   LEU  1063    -28.900 -17.413  25.721  1.00 33.38
ATOM   7212  CD1  LEU  1063    -28.693 -18.923  25.776  1.00 34.58
ATOM   7213  CD2  LEU  1063    -27.560 -16.701  25.837  1.00 33.59
ATOM   7214  C    LEU  1063    -30.243 -15.287  22.718  1.00 31.49
ATOM   7215  O    LEU  1063    -29.410 -14.874  21.910  1.00 29.46
ATOM   7216  N    LEU  1064    -31.504 -15.544  22.385  1.00 30.95
ATOM   7217  CA   LEU  1064    -31.984 -15.334  21.024  1.00 31.20
ATOM   7218  CB   LEU  1064    -33.442 -15.792  20.899  1.00 33.16
ATOM   7219  CG   LEU  1064    -34.097 -15.755  19.513  1.00 34.91
ATOM   7220  CD1  LEU  1064    -35.286 -16.709  19.482  1.00 35.64
ATOM   7221  CD2  LEU  1064    -34.536 -14.350  19.182  1.00 34.56
ATOM   7222  C    LEU  1064    -31.865 -13.850  20.696  1.00 29.59
ATOM   7223  O    LEU  1064    -31.476 -13.474  19.589  1.00 28.93
ATOM   7224  N    SER  1065    -32.191 -13.009  21.672  1.00 27.94
ATOM   7225  CA   SER  1065    -32.106 -11.572  21.475  1.00 27.91
ATOM   7226  CB   SER  1065    -32.645 -10.830  22.697  1.00 28.13
ATOM   7227  OG   SER  1065    -32.610  -9.429  22.483  1.00 30.15
ATOM   7228  C    SER  1065    -30.662 -11.156  21.219  1.00 26.39
ATOM   7229  O    SER  1065    -30.389 -10.386  20.300  1.00 26.00
ATOM   7230  N    ASP  1066    -29.741 -11.665  22.035  1.00 25.06
ATOM   7231  CA   ASP  1066    -28.320 -11.340  21.880  1.00 24.78
ATOM   7232  CB   ASP  1066    -27.491 -11.989  22.989  1.00 25.95
ATOM   7233  CG   ASP  1066    -27.730 -11.348  24.338  1.00 28.70
ATOM   7234  OD1  ASP  1066    -27.860 -10.107  24.385  1.00 30.67
ATOM   7235  OD2  ASP  1066    -27.775 -12.077  25.351  1.00 31.26
ATOM   7236  C    ASP  1066    -27.783 -11.782  20.524  1.00 23.52
ATOM   7237  O    ASP  1066    -26.968 -11.089  19.915  1.00 23.49
ATOM   7238  N    ALA  1067    -28.235 -12.945  20.062  1.00 23.51
ATOM   7239  CA   ALA  1067    -27.813 -13.478  18.776  1.00 22.29
ATOM   7240  CB   ALA  1067    -28.450 -14.842  18.547  1.00 22.43
ATOM   7241  C    ALA  1067    -28.216 -12.516  17.665  1.00 22.46
ATOM   7242  O    ALA  1067    -27.410 -12.164  16.804  1.00 20.38
ATOM   7243  N    LEU  1068    -29.472 -12.091  17.683  1.00 23.01
ATOM   7244  CA   LEU  1068    -29.961 -11.167  16.668  1.00 22.75
ATOM   7245  CB   LEU  1068    -31.464 -10.947  16.844  1.00 22.25
ATOM   7246  CG   LEU  1068    -32.364 -12.126  16.480  1.00 23.59
ATOM   7247  CD1  LEU  1068    -33.765 -11.876  17.028  1.00 25.32
ATOM   7248  CD2  LEU  1068    -32.399 -12.310  14.959  1.00 24.63
ATOM   7249  C    LEU  1068    -29.224  -9.838  16.784  1.00 20.46
ATOM   7250  O    LEU  1068    -28.926  -9.210  15.781  1.00 20.46
ATOM   7251  N    ALA  1069    -28.928  -9.436  18.016  1.00 20.31
ATOM   7252  CA   ALA  1069    -28.234  -8.186  18.284  1.00 20.51
ATOM   7253  CB   ALA  1069    -28.237  -7.899  19.783  1.00 21.24
ATOM   7254  C    ALA  1069    -26.803  -8.201  17.757  1.00 18.78
ATOM   7255  O    ALA  1069    -26.326  -7.211  17.203  1.00 17.76
ATOM   7256  N    LEU  1070    -26.117  -9.325  17.929  1.00 19.42
ATOM   7257  CA   LEU  1070    -24.745  -9.440  17.455  1.00 18.83
ATOM   7258  CB   LEU  1070    -24.092 -10.719  18.005  1.00 18.63
ATOM   7259  CG   LEU  1070    -23.813 -10.721  19.516  1.00 17.66
ATOM   7260  CD1  LEU  1070    -23.361 -12.111  19.965  1.00 17.08
ATOM   7261  CD2  LEU  1070    -22.750  -9.689  19.849  1.00 16.40
ATOM   7262  C    LEU  1070    -24.741  -9.435  15.930  1.00 18.26
ATOM   7263  O    LEU  1070    -23.897  -8.791  15.308  1.00 16.25
ATOM   7264  N    GLU  1071    -25.692 -10.141  15.327  1.00 19.53
ATOM   7265  CA   GLU  1071    -25.789 -10.178  13.872  1.00 19.82
ATOM   7266  CB   GLU  1071    -26.907 -11.137  13.445  1.00 22.79
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ATOM    7267  CG   GLU  1071     -27.158 -11.196  11.944  1.00 23.57
ATOM    7268  CD   GLU  1071     -28.293 -12.133  11.587  1.00 25.87
ATOM    7269  OE1  GLU  1071     -29.412 -11.938  12.111  1.00 26.11
ATOM    7270  OE2  GLU  1071     -28.075 -13.063  10.783  1.00 27.62
ATOM    7271  C    GLU  1071     -26.069  -8.775  13.324  1.00 19.77
ATOM    7272  O    GLU  1071     -25.424  -8.339  12.374  1.00 17.58
ATOM    7273  N    ALA  1072     -27.028  -8.071  13.922  1.00 20.66
ATOM    7274  CA   ALA  1072     -27.368  -6.721  13.467  1.00 20.74
ATOM    7275  CB   ALA  1072     -28.569  -6.182  14.245  1.00 21.28
ATOM    7276  C    ALA  1072     -26.176  -5.786  13.630  1.00 22.41
ATOM    7277  O    ALA  1072     -26.034  -4.804  12.898  1.00 23.66
ATOM    7278  N    ALA  1073     -25.319  -6.099  14.598  1.00 22.57
ATOM    7279  CA   ALA  1073     -24.130  -5.295  14.856  1.00 19.20
ATOM    7280  CB   ALA  1073     -23.572  -5.616  16.241  1.00 20.25
ATOM    7281  C    ALA  1073     -23.058  -5.530  13.792  1.00 19.63
ATOM    7282  O    ALA  1073     -22.136  -4.730  13.647  1.00 19.20
ATOM    7283  N    GLY  1074     -23.168  -6.628  13.049  1.00 17.74
ATOM    7284  CA   GLY  1074     -22.175  -6.890  12.018  1.00 17.83
ATOM    7285  C    GLY  1074     -21.454  -8.225  12.112  1.00 17.24
ATOM    7286  O    GLY  1074     -20.632  -8.545  11.250  1.00 17.98
ATOM    7287  N    ALA  1075     -21.739  -9.005  13.149  1.00 17.76
ATOM    7288  CA   ALA  1075     -21.096 -10.310  13.286  1.00 17.79
ATOM    7289  CB   ALA  1075     -21.544 -10.994  14.581  1.00 16.20
ATOM    7290  C    ALA  1075     -21.479 -11.160  12.080  1.00 18.93
ATOM    7291  O    ALA  1075     -22.659 -11.237  11.709  1.00 18.99
ATOM    7292  N    GLN  1076     -20.478 -11.790  11.468  1.00 17.65
ATOM    7293  CA   GLN  1076     -20.685 -12.625  10.283  1.00 19.07
ATOM    7294  CB   GLN  1076     -19.575 -12.363   9.258  1.00 20.10
ATOM    7295  CG   GLN  1076     -19.644 -10.967   8.666  1.00 21.35
ATOM    7296  CD   GLN  1076     -18.519 -10.664   7.700  1.00 23.80
ATOM    7297  OE1  GLN  1076     -18.528 -11.110   6.547  1.00 28.97
ATOM    7298  NE2  GLN  1076     -17.540  -9.900   8.164  1.00 19.71
ATOM    7299  C    GLN  1076     -20.757 -14.110  10.604  1.00 18.87
ATOM    7300  O    GLN  1076     -21.044 -14.933   9.731  1.00 21.05
ATOM    7301  N    LEU  1077     -20.505 -14.435  11.867  1.00 19.04
ATOM    7302  CA   LEU  1077     -20.540 -15.804  12.361  1.00 18.01
ATOM    7303  CB   LEU  1077     -19.163 -16.467  12.210  1.00 21.10
ATOM    7304  CG   LEU  1077     -18.902 -17.310  10.966  1.00 22.57
ATOM    7305  CD1  LEU  1077     -17.468 -17.821  10.996  1.00 24.38
ATOM    7306  CD2  LEU  1077     -19.878 -18.477  10.920  1.00 23.84
ATOM    7307  C    LEU  1077     -20.925 -15.799  13.831  1.00 17.60
ATOM    7308  O    LEU  1077     -20.699 -14.816  14.536  1.00 17.24
ATOM    7309  N    LEU  1078     -21.514 -16.895  14.293  1.00 16.91
ATOM    7310  CA   LEU  1078     -21.898 -17.013  15.700  1.00 17.04
ATOM    7311  CB   LEU  1078     -23.371 -16.631  15.904  1.00 18.53
ATOM    7312  CG   LEU  1078     -23.888 -16.847  17.336  1.00 19.84
ATOM    7313  CD1  LEU  1078     -23.257 -15.825  18.288  1.00 19.36
ATOM    7314  CD2  LEU  1078     -25.401 -16.719  17.362  1.00 20.91
ATOM    7315  C    LEU  1078     -21.695 -18.434  16.206  1.00 17.33
ATOM    7316  O    LEU  1078     -22.124 -19.395  15.563  1.00 18.22
ATOM    7317  N    VAL  1079     -21.037 -18.555  17.357  1.00 16.40
ATOM    7318  CA   VAL  1079     -20.806 -19.847  17.999  1.00 15.90
ATOM    7319  CB   VAL  1079     -19.364 -19.972  18.562  1.00 16.02
ATOM    7320  CG1  VAL  1079     -19.271 -21.169  19.519  1.00 15.56
ATOM    7321  CG2  VAL  1079     -18.376 -20.161  17.418  1.00 11.83
ATOM    7322  C    VAL  1079     -21.780 -19.977  19.163  1.00 18.15
ATOM    7323  O    VAL  1079     -21.915 -19.056  19.971  1.00 20.36
ATOM    7324  N    LEU  1080     -22.467 -21.113  19.225  1.00 20.11
ATOM    7325  CA   LEU  1080     -23.420 -21.401  20.296  1.00 20.37
ATOM    7326  CB   LEU  1080     -24.792 -21.775  19.730  1.00 21.80
ATOM    7327  CG   LEU  1080     -25.778 -20.659  19.401  1.00 24.35
ATOM    7328  CD1  LEU  1080     -27.092 -21.278  18.936  1.00 22.66
ATOM    7329  CD2  LEU  1080     -26.010 -19.794  20.637  1.00 23.99
ATOM    7330  C    LEU  1080     -22.876 -22.584  21.085  1.00 19.26
ATOM    7331  O    LEU  1080     -22.673 -23.659  20.526  1.00 18.71
ATOM    7332  N    GLU  1081     -22.656 -22.387  22.379  1.00 20.64
ATOM    7333  CA   GLU  1081     -22.110 -23.439  23.224  1.00 21.53
ATOM    7334  CB   GLU  1081     -20.760 -22.988  23.790  1.00 21.79
ATOM    7335  CG   GLU  1081     -20.131 -23.952  24.779  1.00 21.93
ATOM    7336  CD   GLU  1081     -18.676 -23.627  25.073  1.00 25.66
ATOM    7337  OE1  GLU  1081     -18.223 -22.519  24.712  1.00 24.72
ATOM    7338  OE2  GLU  1081     -17.989 -24.481  25.673  1.00 25.08
ATOM    7339  C    GLU  1081     -23.018 -23.897  24.364  1.00 22.06
ATOM    7340  O    GLU  1081     -23.556 -23.083  25.118  1.00 21.49
ATOM    7341  N    CYS  1082     -23.166 -25.215  24.471  1.00 23.09
ATOM    7342  CA   CYS  1082     -23.970 -25.861  25.503  1.00 23.95
ATOM    7343  CB   CYS  1082     -23.146 -26.008  26.776  1.00 25.09
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ATOM	7344	SG	CYS	1082	-21.655	-26.980	26.505	1.00	27.14
ATOM	7345	C	CYS	1082	-25.276	-25.148	25.800	1.00	25.48
ATOM	7346	O	CYS	1082	-25.409	-24.431	26.795	1.00	25.29
ATOM	7347	N	VAL	1083	-26.238	-25.372	24.915	1.00	26.92
ATOM	7348	CA	VAL	1083	-27.561	-24.784	25.012	1.00	29.17
ATOM	7349	CB	VAL	1083	-27.646	-23.516	24.129	1.00	28.96
ATOM	7350	CG1	VAL	1083	-27.611	-23.900	22.655	1.00	30.28
ATOM	7351	CG2	VAL	1083	-28.898	-22.729	24.450	1.00	32.97
ATOM	7352	C	VAL	1083	-28.559	-25.830	24.508	1.00	29.38
ATOM	7353	O	VAL	1083	-28.276	-26.570	23.559	1.00	28.35
ATOM	7354	N	PRO	1084	-29.740	-25.911	25.138	1.00	30.34
ATOM	7355	CD	PRO	1084	-30.314	-25.021	26.160	1.00	29.84
ATOM	7356	CA	PRO	1084	-30.728	-26.896	24.688	1.00	30.70
ATOM	7357	CB	PRO	1084	-31.989	-26.510	25.471	1.00	30.48
ATOM	7358	CG	PRO	1084	-31.775	-25.059	25.807	1.00	31.98
ATOM	7359	C	PRO	1084	-30.928	-26.865	23.176	1.00	31.50
ATOM	7360	O	PRO	1084	-31.018	-25.794	22.572	1.00	32.64
ATOM	7361	N	VAL	1085	-30.983	-28.049	22.574	1.00	32.04
ATOM	7362	CA	VAL	1085	-31.157	-28.185	21.134	1.00	32.80
ATOM	7363	CB	VAL	1085	-31.465	-29.648	20.748	1.00	33.17
ATOM	7364	CG1	VAL	1085	-31.544	-29.780	19.239	1.00	32.51
ATOM	7365	CG2	VAL	1085	-30.392	-30.573	21.309	1.00	32.67
ATOM	7366	C	VAL	1085	-32.291	-27.305	20.632	1.00	34.32
ATOM	7367	O	VAL	1085	-32.224	-26.755	19.530	1.00	33.11
ATOM	7368	N	GLU	1086	-33.325	-27.176	21.457	1.00	36.11
ATOM	7369	CA	GLU	1086	-34.500	-26.371	21.131	1.00	38.46
ATOM	7370	CB	GLU	1086	-35.479	-26.364	22.313	1.00	40.09
ATOM	7371	CG	GLU	1086	-35.428	-27.605	23.195	1.00	42.70
ATOM	7372	CD	GLU	1086	-35.496	-28.894	22.402	1.00	44.30
ATOM	7373	OE1	GLU	1086	-36.420	-29.040	21.573	1.00	45.21
ATOM	7374	OE2	GLU	1086	-34.626	-29.764	22.614	1.00	45.27
ATOM	7375	C	GLU	1086	-34.097	-24.935	20.812	1.00	37.16
ATOM	7376	O	GLU	1086	-34.441	-24.400	19.758	1.00	37.62
ATOM	7377	N	LEU	1087	-33.370	-24.316	21.736	1.00	37.02
ATOM	7378	CA	LEU	1087	-32.928	-22.941	21.562	1.00	36.84
ATOM	7379	CB	LEU	1087	-32.192	-22.455	22.813	1.00	38.04
ATOM	7380	CG	LEU	1087	-32.583	-21.085	23.384	1.00	39.52
ATOM	7381	CD1	LEU	1087	-31.751	-20.804	24.630	1.00	40.56
ATOM	7382	CD2	LEU	1087	-32.378	-19.994	22.349	1.00	39.60
ATOM	7383	C	LEU	1087	-32.020	-22.817	20.345	1.00	36.08
ATOM	7384	O	LEU	1087	-32.141	-21.870	19.570	1.00	35.75
ATOM	7385	N	ALA	1088	-31.116	-23.778	20.173	1.00	35.37
ATOM	7386	CA	ALA	1088	-30.195	-23.757	19.038	1.00	34.84
ATOM	7387	CB	ALA	1088	-29.294	-24.989	19.066	1.00	32.98
ATOM	7388	C	ALA	1088	-30.965	-23.700	17.722	1.00	35.07
ATOM	7389	O	ALA	1088	-30.530	-23.059	16.765	1.00	35.13
ATOM	7390	N	LYS	1089	-32.112	-24.372	17.685	1.00	36.00
ATOM	7391	CA	LYS	1089	-32.952	-24.402	16.493	1.00	37.51
ATOM	7392	CB	LYS	1089	-34.133	-25.353	16.702	1.00	40.32
ATOM	7393	CG	LYS	1089	-33.741	-26.772	17.054	1.00	42.81
ATOM	7394	CD	LYS	1089	-34.966	-27.619	17.354	1.00	46.04
ATOM	7395	CE	LYS	1089	-34.575	-29.010	17.818	1.00	46.35
ATOM	7396	NZ	LYS	1089	-35.755	-29.769	18.300	1.00	47.78
ATOM	7397	C	LYS	1089	-33.485	-23.014	16.161	1.00	35.60
ATOM	7398	O	LYS	1089	-33.330	-22.536	15.039	1.00	35.12
ATOM	7399	N	ARG	1090	-34.117	-22.374	17.141	1.00	35.99
ATOM	7400	CA	ARG	1090	-34.681	-21.039	16.947	1.00	36.46
ATOM	7401	CB	ARG	1090	-35.288	-20.511	18.247	1.00	38.53
ATOM	7402	CG	ARG	1090	-36.350	-21.392	18.862	1.00	42.68
ATOM	7403	CD	ARG	1090	-37.186	-20.592	19.842	1.00	45.65
ATOM	7404	NE	ARG	1090	-36.365	-19.905	20.834	1.00	49.18
ATOM	7405	CZ	ARG	1090	-36.842	-19.046	21.730	1.00	50.27
ATOM	7406	NH1	ARG	1090	-38.137	-18.769	21.758	1.00	51.07
ATOM	7407	NH2	ARG	1090	-36.029	-18.464	22.601	1.00	51.07
ATOM	7408	C	ARG	1090	-33.639	-20.038	16.458	1.00	34.36
ATOM	7409	O	ARG	1090	-33.859	-19.334	15.472	1.00	34.30
ATOM	7410	N	ILE	1091	-32.513	-19.976	17.163	1.00	32.94
ATOM	7411	CA	ILE	1091	-31.432	-19.059	16.820	1.00	30.49
ATOM	7412	CB	ILE	1091	-30.265	-19.179	17.828	1.00	29.84
ATOM	7413	CG2	ILE	1091	-29.087	-18.304	17.382	1.00	26.75
ATOM	7414	CG1	ILE	1091	-30.749	-18.770	19.222	1.00	27.82
ATOM	7415	CD1	ILE	1091	-29.749	-19.036	20.332	1.00	28.01
ATOM	7416	C	ILE	1091	-30.904	-19.311	15.418	1.00	29.96
ATOM	7417	O	ILE	1091	-30.686	-18.374	14.650	1.00	30.26
ATOM	7418	N	THR	1092	-30.711	-20.580	15.078	1.00	30.58
ATOM	7419	CA	THR	1092	-30.193	-20.929	13.760	1.00	31.05
ATOM	7420	CB	THR	1092	-29.921	-22.433	13.645	1.00	31.25

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ATOM   7421  OG1 THR  1092     -28.972 -22.827  14.648  1.00 31.53
ATOM   7422  CG2 THR  1092     -29.357 -22.760  12.269  1.00 29.03
ATOM   7423  C   THR  1092     -31.156 -20.527  12.654  1.00 31.78
ATOM   7424  O   THR  1092     -30.742 -20.039  11.602  1.00 32.76
ATOM   7425  N   GLU  1093     -32.443 -20.742  12.897  1.00 32.97
ATOM   7426  CA  GLU  1093     -33.467 -20.405  11.918  1.00 34.29
ATOM   7427  CB  GLU  1093     -34.743 -21.190  12.215  1.00 35.93
ATOM   7428  CG  GLU  1093     -34.531 -22.694  12.240  1.00 40.74
ATOM   7429  CD  GLU  1093     -35.785 -23.460  12.620  1.00 44.39
ATOM   7430  OE1 GLU  1093     -36.357 -23.178  13.698  1.00 46.36
ATOM   7431  OE2 GLU  1093     -36.193 -24.347  11.842. 1.00 45.61
ATOM   7432  C   GLU  1093     -33.760 -18.909  11.913  1.00 32.84
ATOM   7433  O   GLU  1093     -34.238 -18.366  10.915  1.00 33.67
ATOM   7434  N   ALA  1094     -33.461 -18.244  13.024  1.00 32.28
ATOM   7435  CA  ALA  1094     -33.705 -16.810  13.138  1.00 30.66
ATOM   7436  CB  ALA  1094     -33.876 -16.430  14.602  1.00 31.86
ATOM   7437  C   ALA  1094     -32.604 -15.965  12.503  1.00 29.98
ATOM   7438  O   ALA  1094     -32.881 -14.912  11.927  1.00 29.52
ATOM   7439  N   LEU  1095     -31.358 -16.424  12.602  1.00 27.75
ATOM   7440  CA  LEU  1095     -30.240 -15.677  12.035  1.00 26.60
ATOM   7441  CB  LEU  1095     -28.973 -15.892  12.875  1.00 27.24
ATOM   7442  CG  LEU  1095     -28.992 -15.409  14.327  1.00 28.91
ATOM   7443  CD1 LEU  1095     -27.602 -15.587  14.941  1.00 28.85
ATOM   7444  CD2 LEU  1095     -29.400 -13.948  14.386  1.00 32.53
ATOM   7445  C   LEU  1095     -29.940 -16.024  10.581  1.00 25.13
ATOM   7446  O   LEU  1095     -30.069 -17.176  10.161  1.00 25.13
ATOM   7447  N   ALA  1096     -29.544 -15.016   9.813  1.00 23.38
ATOM   7448  CA  ALA  1096     -29.194 -15.221   8.417  1.00 24.18
ATOM   7449  CB  ALA  1096     -29.358 -13.921   7.636  1.00 26.66
ATOM   7450  C   ALA  1096     -27.742 -15.704   8.340  1.00 23.29
ATOM   7451  O   ALA  1096     -27.383 -16.473   7.446  1.00 22.71
ATOM   7452  N   ILE  1097     -26.910 -15.253   9.278  1.00 22.57
ATOM   7453  CA  ILE  1097     -25.507 -15.662   9.295  1.00 22.02
ATOM   7454  CB  ILE  1097     -24.638 -14.773  10.231  1.00 20.30
ATOM   7455  CG2 ILE  1097     -24.637 -13.339   9.735  1.00 18.65
ATOM   7456  CG1 ILE  1097     -25.141 -14.868  11.671  1.00 19.11
ATOM   7457  CD1 ILE  1097     -24.232 -14.180  12.681  1.00 16.71
ATOM   7458  C   ILE  1097     -25.392 -17.099   9.779  1.00 21.40
ATOM   7459  O   ILE  1097     -26.266 -17.594  10.489  1.00 20.96
ATOM   7460  N   PRO  1098     -24.313 -17.793   9.391  1.00 21.86
ATOM   7461  CD  PRO  1098     -23.284 -17.422   8.409  1.00 22.08
ATOM   7462  CA  PRO  1098     -24.157 -19.180   9.832  1.00 22.32
ATOM   7463  CB  PRO  1098     -23.004 -19.700   8.968  1.00 21.93
ATOM   7464  CG  PRO  1098     -22.236 -18.469   8.626  1.00 24.68
ATOM   7465  C   PRO  1098     -23.896 -19.316  11.329  1.00 22.49
ATOM   7466  O   PRO  1098     -23.160 -18.528  11.933  1.00 21.97
ATOM   7467  N   VAL  1099     -24.527 -20.317  11.930  1.00 21.40
ATOM   7468  CA  VAL  1099     -24.368 -20.569  13.351  1.00 20.38
ATOM   7469  CB  VAL  1099     -25.735 -20.667  14.048  1.00 21.59
ATOM   7470  CG1 VAL  1099     -25.543 -21.007  15.518  1.00 20.95
ATOM   7471  CG2 VAL  1099     -26.485 -19.348  13.902  1.00 20.13
ATOM   7472  C   VAL  1099     -23.593 -21.862  13.568  1.00 20.91
ATOM   7473  O   VAL  1099     -24.009 -22.929  13.119  1.00 21.10
ATOM   7474  N   ILE  1100     -22.459 -21.749  14.252  1.00 20.43
ATOM   7475  CA  ILE  1100     -21.606 -22.897  14.553  1.00 19.39
ATOM   7476  CB  ILE  1100     -20.106 -22.533  14.393  1.00 18.61
ATOM   7477  CG2 ILE  1100     -19.235 -23.709  14.814  1.00 21.73
ATOM   7478  CG1 ILE  1100     -19.807 -22.154  12.939  1.00 19.30
ATOM   7479  CD1 ILE  1100     -18.369 -21.678  12.698  1.00 18.01
ATOM   7480  C   ILE  1100     -21.862 -23.344  15.992  1.00 17.92
ATOM   7481  O   ILE  1100     -21.811 -22.541  16.925  1.00 19.15
ATOM   7482  N   GLY  1101     -22.126 -24.629  16.179  1.00 17.28
ATOM   7483  CA  GLY  1101     -22.392 -25.087  17.521  1.00 15.61
ATOM   7484  C   GLY  1101     -21.405 -26.058  18.134  1.00 16.33
ATOM   7485  O   GLY  1101     -20.607 -26.692  17.449  1.00 14.73
ATOM   7486  N   ILE  1102     -21.450 -26.126  19.457  1.00 16.82
ATOM   7487  CA  ILE  1102     -20.642 -27.055  20.228  1.00 17.43
ATOM   7488  CB  ILE  1102     -19.213 -26.493  20.587  1.00 15.75
ATOM   7489  CG2 ILE  1102     -19.297 -25.103  21.214  1.00 16.29
ATOM   7490  CG1 ILE  1102     -18.514 -27.477  21.519  1.00 17.38
ATOM   7491  CD1 ILE  1102     -17.048 -27.149  21.769  1.00 17.39
ATOM   7492  C   ILE  1102     -21.486 -27.320  21.466  1.00 16.49
ATOM   7493  O   ILE  1102     -21.652 -26.457  22.324  1.00 18.86
ATOM   7494  N   GLY  1103     -22.064 -28.515  21.525  1.00 18.98
ATOM   7495  CA  GLY  1103     -22.913 -28.857  22.649  1.00 19.60
ATOM   7496  C   GLY  1103     -24.275 -28.209  22.470  1.00 21.48
ATOM   7497  O   GLY  1103     -24.969 -27.921  23.443  1.00 22.27
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ATOM	7498	N	ALA	1104	-24.652	-27.972	21.217	1.00	22.82
ATOM	7499	CA	ALA	1104	-25.935	-27.353	20.908	1.00	25.45
ATOM	7500	CB	ALA	1104	-25.716	-25.988	20.259	1.00	25.68
ATOM	7501	C	ALA	1104	-26.771	-28.236	19.987	1.00	25.66
ATOM	7502	O	ALA	1104	-27.830	-27.820	19.515	1.00	26.77
ATOM	7503	N	GLY	1105	-26.293	-29.448	19.722	1.00	26.62
ATOM	7504	CA	GLY	1105	-27.026	-30.351	18.852	1.00	26.39
ATOM	7505	C	GLY	1105	-26.597	-30.240	17.400	1.00	26.35
ATOM	7506	O	GLY	1105	-25.665	-29.504	17.087	1.00	27.27
ATOM	7507	N	ASN	1106	-27.276	-30.966	16.514	1.00	24.67
ATOM	7508	CA	ASN	1106	-26.946	-30.947	15.095	1.00	25.28
ATOM	7509	CB	ASN	1106	-27.003	-32.363	14.513	1.00	27.03
ATOM	7510	CG	ASN	1106	-28.406	-32.957	14.543	1.00	28.79
ATOM	7511	OD1	ASN	1106	-28.706	-33.901	13.810	1.00	30.36
ATOM	7512	ND2	ASN	1106	-29.267	-32.414	15.398	1.00	26.73
ATOM	7513	C	ASN	1106	-27.851	-30.036	14.273	1.00	25.16
ATOM	7514	O	ASN	1106	-27.889	-30.133	13.046	1.00	26.21
ATOM	7515	N	VAL	1107	-28.563	-29.143	14.949	1.00	26.94
ATOM	7516	CA	VAL	1107	-29.476	-28.217	14.287	1.00	27.66
ATOM	7517	CB	VAL	1107	-30.583	-27.753	15.255	1.00	29.34
ATOM	7518	CG1	VAL	1107	-31.608	-26.904	14.507	1.00	33.27
ATOM	7519	CG2	VAL	1107	-31.250	-28.962	15.898	1.00	30.08
ATOM	7520	C	VAL	1107	-28.751	-26.984	13.761	1.00	27.29
ATOM	7521	O	VAL	1107	-29.274	-26.255	12.915	1.00	26.10
ATOM	7522	N	THR	1108	-27.547	-26.746	14.267	1.00	24.64
ATOM	7523	CA	THR	1108	-26.769	-25.592	13.840	1.00	22.37
ATOM	7524	CB	THR	1108	-25.594	-25.337	14.805	1.00	21.49
ATOM	7525	OG1	THR	1108	-24.814	-26.532	14.944	1.00	20.03
ATOM	7526	CG2	THR	1108	-26.116	-24.918	16.171	1.00	20.67
ATOM	7527	C	THR	1108	-26.242	-25.787	12.424	1.00	22.32
ATOM	7528	O	THR	1108	-26.276	-26.891	11.888	1.00	23.83
ATOM	7529	N	ASP	1109	-25.764	-24.705	11.820	1.00	21.15
ATOM	7530	CA	ASP	1109	-25.241	-24.746	10.461	1.00	21.07
ATOM	7531	CB	ASP	1109	-25.122	-23.326	9.918	1.00	22.92
ATOM	7532	CG	ASP	1109	-26.450	-22.605	9.904	1.00	25.19
ATOM	7533	OD1	ASP	1109	-27.371	-23.091	9.220	1.00	22.36
ATOM	7534	OD2	ASP	1109	-26.577	-21.565	10.589	1.00	26.54
ATOM	7535	C	ASP	1109	-23.889	-25.432	10.389	1.00	20.97
ATOM	7536	O	ASP	1109	-23.511	-25.975	9.353	1.00	20.53
ATOM	7537	N	GLY	1110	-23.161	-25.396	11.498	1.00	21.29
ATOM	7538	CA	GLY	1110	-21.855	-26.020	11.541	1.00	19.83
ATOM	7539	C	GLY	1110	-21.532	-26.555	12.920	1.00	18.45
ATOM	7540	O	GLY	1110	-22.321	-26.421	13.856	1.00	16.61
ATOM	7541	N	GLN	1111	-20.360	-27.169	13.046	1.00	18.75
ATOM	7542	CA	GLN	1111	-19.920	-27.725	14.315	1.00	18.97
ATOM	7543	CB	GLN	1111	-20.030	-29.253	14.300	1.00	20.40
ATOM	7544	CG	GLN	1111	-21.434	-29.822	14.149	1.00	21.52
ATOM	7545	CD	GLN	1111	-22.353	-29.426	15.281	1.00	22.47
ATOM	7546	OE1	GLN	1111	-21.950	-29.393	16.448	1.00	25.39
ATOM	7547	NE2	GLN	1111	-23.607	-29.136	14.946	1.00	23.89
ATOM	7548	C	GLN	1111	-18.462	-27.364	14.596	1.00	17.61
ATOM	7549	O	GLN	1111	-17.697	-27.072	13.679	1.00	16.60
ATOM	7550	N	ILE	1112	-18.089	-27.389	15.871	1.00	17.79
ATOM	7551	CA	ILE	1112	-16.716	-27.131	16.276	1.00	18.54
ATOM	7552	CB	ILE	1112	-16.454	-25.623	16.531	1.00	18.72
ATOM	7553	CG2	ILE	1112	-17.191	-25.146	17.786	1.00	18.50
ATOM	7554	CG1	ILE	1112	-14.945	-25.390	16.671	1.00	18.93
ATOM	7555	CD1	ILE	1112	-14.535	-23.906	16.715	1.00	20.59
ATOM	7556	C	ILE	1112	-16.417	-27.941	17.540	1.00	21.11
ATOM	7557	O	ILE	1112	-17.319	-28.264	18.321	1.00	20.41
ATOM	7558	N	LEU	1113	-15.148	-28.288	17.720	1.00	22.35
ATOM	7559	CA	LEU	1113	-14.726	-29.054	18.880	1.00	23.98
ATOM	7560	CB	LEU	1113	-15.130	-30.515	18.700	1.00	28.74
ATOM	7561	CG	LEU	1113	-15.427	-31.304	19.980	1.00	32.72
ATOM	7562	CD1	LEU	1113	-16.778	-30.878	20.556	1.00	32.53
ATOM	7563	CD2	LEU	1113	-15.441	-32.784	19.648	1.00	35.33
ATOM	7564	C	LEU	1113	-13.212	-28.947	18.990	1.00	23.34
ATOM	7565	O	LEU	1113	-12.534	-28.716	17.983	1.00	22.61
ATOM	7566	N	VAL	1114	-12.687	-29.104	20.205	1.00	21.36
ATOM	7567	CA	VAL	1114	-11.246	-29.044	20.440	1.00	19.62
ATOM	7568	CB	VAL	1114	-10.928	-28.996	21.966	1.00	20.48
ATOM	7569	CG1	VAL	1114	-9.434	-28.834	22.187	1.00	20.97
ATOM	7570	CG2	VAL	1114	-11.702	-27.870	22.620	1.00	20.82
ATOM	7571	C	VAL	1114	-10.628	-30.304	19.851	1.00	18.23
ATOM	7572	O	VAL	1114	-11.017	-31.419	20.210	1.00	18.70
ATOM	7573	N	MET	1115	-9.676	-30.137	18.943	1.00	16.13
ATOM	7574	CA	MET	1115	-9.041	-31.287	18.305	1.00	14.70

ATOM	7575	CB	MET	1115	-7.900	-30.830	17.390	1.00	14.14
ATOM	7576	CG	MET	1115	-6.823	-30.025	18.095	1.00	15.65
ATOM	7577	SD	MET	1115	-5.242	-30.356	17.297	1.00	13.45
ATOM	7578	CE	MET	1115	-4.722	-31.861	18.197	1.00	11.23
ATOM	7579	C	MET	1115	-8.492	-32.315	19.287	1.00	13.25
ATOM	7580	O	MET	1115	-8.533	-33.510	19.019	1.00	16.95
ATOM	7581	N	HIS	1116	-7.969	-31.866	20.421	1.00	12.84
ATOM	7582	CA	HIS	1116	-7.414	-32.828	21.377	1.00	14.12
ATOM	7583	CB	HIS	1116	-6.724	-32.107	22.521	1.00	13.42
ATOM	7584	CG	HIS	1116	-5.516	-31.336	22.084	1.00	14.34
ATOM	7585	CD2	HIS	1116	-5.403	-30.121	21.494	1.00	12.56
ATOM	7586	ND1	HIS	1116	-4.237	-31.839	22.165	1.00	14.51
ATOM	7587	CE1	HIS	1116	-3.384	-30.971	21.646	1.00	12.60
ATOM	7588	NE2	HIS	1116	-4.067	-29.919	21.230	1.00	19.44
ATOM	7589	C	HIS	1116	-8.476	-33.784	21.920	1.00	14.04
ATOM	7590	O	HIS	1116	-8.168	-34.939	22.232	1.00	16.57
ATOM	7591	N	ASP	1117	-9.717	-33.318	22.041	1.00	12.82
ATOM	7592	CA	ASP	1117	-10.794	-34.176	22.536	1.00	15.57
ATOM	7593	CB	ASP	1117	-12.014	-33.359	22.984	1.00	15.67
ATOM	7594	CG	ASP	1117	-11.741	-32.484	24.179	1.00	15.82
ATOM	7595	OD1	ASP	1117	-10.803	-32.772	24.947	1.00	15.40
ATOM	7596	OD2	ASP	1117	-12.486	-31.500	24.364	1.00	16.01
ATOM	7597	C	ASP	1117	-11.256	-35.108	21.424	1.00	17.95
ATOM	7598	O	ASP	1117	-11.438	-36.306	21.633	1.00	18.83
ATOM	7599	N	ALA	1118	-11.442	-34.533	20.237	1.00	18.76
ATOM	7600	CA	ALA	1118	-11.927	-35.267	19.073	1.00	20.93
ATOM	7601	CB	ALA	1118	-12.291	-34.286	17.965	1.00	21.95
ATOM	7602	C	ALA	1118	-10.983	-36.323	18.525	1.00	22.38
ATOM	7603	O	ALA	1118	-11.420	-37.225	17.815	1.00	23.45
ATOM	7604	N	PHE	1119	-9.698	-36.218	18.846	1.00	23.93
ATOM	7605	CA	PHE	1119	-8.739	-37.179	18.340	1.00	27.36
ATOM	7606	CB	PHE	1119	-7.670	-36.470	17.521	1.00	32.16
ATOM	7607	CG	PHE	1119	-8.223	-35.714	16.375	1.00	35.71
ATOM	7608	CD1	PHE	1119	-9.075	-36.337	15.474	1.00	37.69
ATOM	7609	CD2	PHE	1119	-7.922	-34.371	16.203	1.00	38.44
ATOM	7610	CE1	PHE	1119	-9.620	-35.633	14.420	1.00	40.51
ATOM	7611	CE2	PHE	1119	-8.463	-33.660	15.152	1.00	39.76
ATOM	7612	CZ	PHE	1119	-9.314	-34.287	14.256	1.00	41.23
ATOM	7613	C	PHE	1119	-8.086	-38.050	19.379	1.00	26.58
ATOM	7614	O	PHE	1119	-6.942	-38.460	19.212	1.00	30.89
ATOM	7615	N	GLY	1120	-8.817	-38.318	20.454	1.00	24.48
ATOM	7616	CA	GLY	1120	-8.327	-39.186	21.505	1.00	24.13
ATOM	7617	C	GLY	1120	-7.005	-38.851	22.160	1.00	23.63
ATOM	7618	O	GLY	1120	-6.283	-39.758	22.581	1.00	22.16
ATOM	7619	N	ILE	1121	-6.680	-37.565	22.252	1.00	20.46
ATOM	7620	CA	ILE	1121	-5.441	-37.145	22.900	1.00	19.00
ATOM	7621	CB	ILE	1121	-4.836	-35.889	22.225	1.00	16.75
ATOM	7622	CG2	ILE	1121	-3.614	-35.423	22.995	1.00	16.32
ATOM	7623	CG1	ILE	1121	-4.456	-36.203	20.777	1.00	15.62
ATOM	7624	CD1	ILE	1121	-4.238	-34.960	19.921	1.00	14.00
ATOM	7625	C	ILE	1121	-5.758	-36.832	24.359	1.00	19.57
ATOM	7626	O	ILE	1121	-5.100	-37.335	25.265	1.00	17.67
ATOM	7627	N	THR	1122	-6.774	-36.009	24.591	1.00	20.23
ATOM	7628	CA	THR	1122	-7.148	-35.671	25.958	1.00	23.81
ATOM	7629	CB	THR	1122	-8.387	-34.773	25.979	1.00	24.49
ATOM	7630	OG1	THR	1122	-9.425	-35.373	25.195	1.00	28.23
ATOM	7631	CG2	THR	1122	-8.053	-33.409	25.402	1.00	18.95
ATOM	7632	C	THR	1122	-7.443	-36.940	26.751	1.00	26.71
ATOM	7633	O	THR	1122	-8.052	-37.872	26.228	1.00	26.64
ATOM	7634	N	GLY	1123	-7.002	-36.962	28.005	1.00	30.43
ATOM	7635	CA	GLY	1123	-7.207	-38.113	28.870	1.00	37.27
ATOM	7636	C	GLY	1123	-8.332	-39.059	28.484	1.00	39.65
ATOM	7637	O	GLY	1123	-8.205	-39.847	27.544	1.00	41.64
ATOM	7638	N	GLY	1124	-9.441	-38.986	29.211	1.00	40.46
ATOM	7639	CA	GLY	1124	-10.569	-39.852	28.920	1.00	38.97
ATOM	7640	C	GLY	1124	-11.873	-39.208	29.340	1.00	37.18
ATOM	7641	O	GLY	1124	-12.953	-39.759	29.128	1.00	38.03
ATOM	7642	N	HIS	1125	-11.763	-38.026	29.932	1.00	36.46
ATOM	7643	CA	HIS	1125	-12.924	-37.290	30.399	1.00	35.97
ATOM	7644	CB	HIS	1125	-12.653	-36.726	31.792	1.00	37.38
ATOM	7645	CG	HIS	1125	-12.325	-37.771	32.812	1.00	39.81
ATOM	7646	CD2	HIS	1125	-11.211	-37.973	33.554	1.00	40.42
ATOM	7647	ND1	HIS	1125	-13.207	-38.769	33.164	1.00	40.29
ATOM	7648	CE1	HIS	1125	-12.651	-39.541	34.081	1.00	40.40
ATOM	7649	NE2	HIS	1125	-11.440	-39.080	34.335	1.00	41.75
ATOM	7650	C	HIS	1125	-13.291	-36.152	29.456	1.00	34.78
ATOM	7651	O	HIS	1125	-13.410	-35.000	29.880	1.00	36.44

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ATOM    7652  N   ILE  1126     -13.466 -36.466  28.178  1.00 31.25
ATOM    7653  CA  ILE  1126     -13.835 -35.435  27.215  1.00 28.48
ATOM    7654  CB  ILE  1126     -13.804 -35.963  25.767  1.00 26.91
ATOM    7655  CG2 ILE  1126     -12.394 -36.360  25.388  1.00 26.98
ATOM    7656  CG1 ILE  1126     -14.768 -37.138  25.614  1.00 25.19
ATOM    7657  CD1 ILE  1126     -14.926 -37.612  24.194  1.00 22.08
ATOM    7658  C   ILE  1126     -15.249 -34.961  27.540  1.00 28.29
ATOM    7659  O   ILE  1126     -16.044 -35.702  28.122  1.00 27.48
ATOM    7660  N   PRO  1127     -15.586 -33.719  27.168  1.00 27.02
ATOM    7661  CD  PRO  1127     -14.838 -32.750  26.350  1.00 26.06
ATOM    7662  CA  PRO  1127     -16.936 -33.232  27.470  1.00 27.27
ATOM    7663  CB  PRO  1127     -16.946 -31.831  26.853  1.00 27.40
ATOM    7664  CG  PRO  1127     -15.944 -31.927  25.749  1.00 29.05
ATOM    7665  C   PRO  1127     -18.045 -34.136  26.925  1.00 27.42
ATOM    7666  O   PRO  1127     -17.839 -34.877  25.962  1.00 25.23
ATOM    7667  N   LYS  1128     -19.213 -34.081  27.559  1.00 28.67
ATOM    7668  CA  LYS  1128     -20.354 -34.895  27.145  1.00 29.40
ATOM    7669  CB  LYS  1128     -21.571 -34.609  28.033  1.00 32.06
ATOM    7670  CG  LYS  1128     -21.569 -35.326  29.376  1.00 37.86
ATOM    7671  CD  LYS  1128     -20.410 -34.884  30.254  1.00 41.77
ATOM    7672  CE  LYS  1128     -20.424 -35.614  31.586  1.00 42.92
ATOM    7673  NZ  LYS  1128     -19.313 -35.170  32.465  1.00 45.73
ATOM    7674  C   LYS  1128     -20.746 -34.674  25.691  1.00 28.13
ATOM    7675  O   LYS  1128     -21.216 -35.595  25.020  1.00 28.71
ATOM    7676  N   PHE  1129     -20.549 -33.452  25.208  1.00 25.91
ATOM    7677  CA  PHE  1129     -20.902 -33.098  23.834  1.00 24.94
ATOM    7678  CB  PHE  1129     -21.220 -31.605  23.761  1.00 24.88
ATOM    7679  CG  PHE  1129     -20.113 -30.717  24.268  1.00 25.53
ATOM    7680  CD1 PHE  1129     -18.967 -30.501  23.508  1.00 25.50
ATOM    7681  CD2 PHE  1129     -20.218 -30.098  25.508  1.00 26.10
ATOM    7682  CE1 PHE  1129     -17.938 -29.678  23.976  1.00 24.44
ATOM    7683  CE2 PHE  1129     -19.196 -29.272  25.989  1.00 28.35
ATOM    7684  CZ  PHE  1129     -18.055 -29.062  25.219  1.00 25.02
ATOM    7685  C   PHE  1129     -19.830 -33.444  22.809  1.00 24.51
ATOM    7686  O   PHE  1129     -20.017 -33.241  21.608  1.00 25.21
ATOM    7687  N   ALA  1130     -18.711 -33.975  23.285  1.00 22.79
ATOM    7688  CA  ALA  1130     -17.611 -34.322  22.400  1.00 22.40
ATOM    7689  CB  ALA  1130     -16.285 -33.933  23.047  1.00 22.61
ATOM    7690  C   ALA  1130     -17.587 -35.793  22.030  1.00 22.33
ATOM    7691  O   ALA  1130     -18.222 -36.627  22.674  1.00 23.47
ATOM    7692  N   LYS  1131     -16.824 -36.105  20.992  1.00 21.42
ATOM    7693  CA  LYS  1131     -16.699 -37.473  20.534  1.00 21.01
ATOM    7694  CB  LYS  1131     -17.667 -37.723  19.374  1.00 21.85
ATOM    7695  CG  LYS  1131     -17.613 -39.131  18.807  1.00 25.99
ATOM    7696  CD  LYS  1131     -18.660 -39.339  17.722  1.00 27.36
ATOM    7697  CE  LYS  1131     -18.521 -40.719  17.096  1.00 28.45
ATOM    7698  NZ  LYS  1131     -19.590 -41.000  16.100  1.00 30.79
ATOM    7699  C   LYS  1131     -15.272 -37.770  20.099  1.00 20.50
ATOM    7700  O   LYS  1131     -14.615 -36.946  19.456  1.00 19.85
ATOM    7701  N   ASN  1132     -14.788 -38.946  20.475  1.00 18.18
ATOM    7702  CA  ASN  1132     -13.450 -39.373  20.100  1.00 19.09
ATOM    7703  CB  ASN  1132     -12.860 -40.286  21.178  1.00 18.83
ATOM    7704  CG  ASN  1132     -11.520 -40.864  20.775  1.00 18.02
ATOM    7705  OD1 ASN  1132     -11.079 -40.694  19.642  1.00 17.99
ATOM    7706  ND2 ASN  1132     -10.872 -41.557  21.696  1.00 17.64
ATOM    7707  C   ASN  1132     -13.563 -40.141  18.786  1.00 18.64
ATOM    7708  O   ASN  1132     -13.884 -41.332  18.781  1.00 19.00
ATOM    7709  N   PHE  1133     -13.296 -39.460  17.678  1.00 18.32
ATOM    7710  CA  PHE  1133     -13.376 -40.079  16.361  1.00 18.77
ATOM    7711  CB  PHE  1133     -13.485 -39.008  15.268  1.00 19.12
ATOM    7712  CG  PHE  1133     -14.774 -38.242  15.297  1.00 19.88
ATOM    7713  CD1 PHE  1133     -14.925 -37.142  16.127  1.00 20.42
ATOM    7714  CD2 PHE  1133     -15.858 -38.656  14.531  1.00 21.73
ATOM    7715  CE1 PHE  1133     -16.144 -36.453  16.200  1.00 22.12
ATOM    7716  CE2 PHE  1133     -17.086 -37.978  14.592  1.00 22.46
ATOM    7717  CZ  PHE  1133     -17.225 -36.879  15.431  1.00 21.23
ATOM    7718  C   PHE  1133     -12.208 -40.999  16.036  1.00 18.83
ATOM    7719  O   PHE  1133     -12.314 -41.836  15.144  1.00 19.05
ATOM    7720  N   LEU  1134     -11.094 -40.849  16.749  1.00 17.75
ATOM    7721  CA  LEU  1134      -9.920 -41.686  16.488  1.00 18.27
ATOM    7722  CB  LEU  1134      -8.691 -41.149  17.230  1.00 17.93
ATOM    7723  CG  LEU  1134      -7.395 -41.958  17.089  1.00 19.52
ATOM    7724  CD1 LEU  1134      -6.983 -41.987  15.625  1.00 18.91
ATOM    7725  CD2 LEU  1134      -6.271 -41.335  17.936  1.00 16.96
ATOM    7726  C   LEU  1134     -10.170 -43.126  16.908  1.00 19.68
ATOM    7727  O   LEU  1134      -9.860 -44.059  16.167  1.00 17.88
ATOM    7728  N   ALA  1135     -10.727 -43.297  18.101  1.00 22.36
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ATOM	7729	CA	ALA	1135	-11.027	-44.623	18.617	1.00	27.76
ATOM	7730	CB	ALA	1135	-11.775	-44.513	19.934	1.00	26.50
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ATOM	7732	O	ALA	1135	-11.683	-46.590	17.403	1.00	33.61
ATOM	7733	N	GLU	1136	-12.785	-44.668	16.964	1.00	36.50
ATOM	7734	CA	GLU	1136	-13.676	-45.240	15.963	1.00	40.36
ATOM	7735	CB	GLU	1136	-14.606	-44.158	15.403	1.00	43.73
ATOM	7736	CG	GLU	1136	-15.434	-43.403	16.441	1.00	48.10
ATOM	7737	CD	GLU	1136	-16.536	-44.250	17.054	1.00	50.51
ATOM	7738	OE1	GLU	1136	-16.222	-45.167	17.846	1.00	51.66
ATOM	7739	OE2	GLU	1136	-17.719	-44.002	16.735	1.00	51.42
ATOM	7740	C	GLU	1136	-12.865	-45.831	14.820	1.00	41.02
ATOM	7741	O	GLU	1136	-12.942	-47.026	14.544	1.00	42.71
ATOM	7742	N	THR	1137	-12.091	-44.979	14.155	1.00	39.55
ATOM	7743	CA	THR	1137	-11.273	-45.406	13.033	1.00	38.43
ATOM	7744	CB	THR	1137	-10.911	-44.218	12.124	1.00	39.66
ATOM	7745	OG1	THR	1137	-9.779	-44.569	11.313	1.00	41.87
ATOM	7746	CG2	THR	1137	-10.595	-42.973	12.953	1.00	37.36
ATOM	7747	C	THR	1137	-9.993	-46.105	13.474	1.00	37.92
ATOM	7748	O	THR	1137	-9.965	-47.326	13.641	1.00	40.29
ATOM	7749	N	GLY	1138	-8.932	-45.333	13.659	1.00	33.87
ATOM	7750	CA	GLY	1138	-7.669	-45.905	14.084	1.00	31.20
ATOM	7751	C	GLY	1138	-6.522	-45.066	13.574	1.00	29.12
ATOM	7752	O	GLY	1138	-5.366	-45.257	13.951	1.00	27.41
ATOM	7753	N	ASP	1139	-6.865	-44.119	12.711	1.00	25.34
ATOM	7754	CA	ASP	1139	-5.893	-43.224	12.105	1.00	23.78
ATOM	7755	CB	ASP	1139	-5.746	-43.614	10.635	1.00	27.59
ATOM	7756	CG	ASP	1139	-5.008	-42.595	9.841	1.00	30.02
ATOM	7757	OD1	ASP	1139	-5.661	-41.880	9.048	1.00	26.93
ATOM	7758	OD2	ASP	1139	-3.776	-42.508	10.021	1.00	33.99
ATOM	7759	C	ASP	1139	-6.398	-41.781	12.260	1.00	19.81
ATOM	7760	O	ASP	1139	-7.592	-41.536	12.137	1.00	17.74
ATOM	7761	N	ILE	1140	-5.505	-40.832	12.548	1.00	18.99
ATOM	7762	CA	ILE	1140	-5.937	-39.445	12.737	1.00	16.56
ATOM	7763	CB	ILE	1140	-4.777	-38.540	13.260	1.00	15.40
ATOM	7764	CG2	ILE	1140	-5.216	-37.074	13.303	1.00	14.63
ATOM	7765	CG1	ILE	1140	-4.378	-38.987	14.673	1.00	14.66
ATOM	7766	CD1	ILE	1140	-3.217	-38.193	15.276	1.00	14.86
ATOM	7767	C	ILE	1140	-6.576	-38.792	11.507	1.00	15.51
ATOM	7768	O	ILE	1140	-7.594	-38.099	11.627	1.00	15.94
ATOM	7769	N	ARG	1141	-6.006	-39.003	10.325	1.00	15.97
ATOM	7770	CA	ARG	1141	-6.596	-38.411	9.129	1.00	17.73
ATOM	7771	CB	ARG	1141	-5.678	-38.608	7.916	1.00	18.46
ATOM	7772	CG	ARG	1141	-4.473	-37.682	7.944	1.00	20.14
ATOM	7773	CD	ARG	1141	-3.493	-37.933	6.816	1.00	19.99
ATOM	7774	NE	ARG	1141	-2.379	-36.984	6.875	1.00	21.20
ATOM	7775	CZ	ARG	1141	-1.465	-36.945	7.843	1.00	21.99
ATOM	7776	NH1	ARG	1141	-1.511	-37.805	8.851	1.00	20.45
ATOM	7777	NH2	ARG	1141	-0.497	-36.042	7.804	1.00	23.21
ATOM	7778	C	ARG	1141	-7.970	-39.026	8.885	1.00	17.66
ATOM	7779	O	ARG	1141	-8.910	-38.330	8.484	1.00	16.58
ATOM	7780	N	ALA	1142	-8.096	-40.325	9.146	1.00	17.72
ATOM	7781	CA	ALA	1142	-9.377	-41.004	8.963	1.00	17.43
ATOM	7782	CB	ALA	1142	-9.208	-42.515	9.140	1.00	19.12
ATOM	7783	C	ALA	1142	-10.395	-40.471	9.962	1.00	19.39
ATOM	7784	O	ALA	1142	-11.594	-40.372	9.663	1.00	18.01
ATOM	7785	N	ALA	1143	-9.925	-40.132	11.158	1.00	17.42
ATOM	7786	CA	ALA	1143	-10.824	-39.600	12.177	1.00	18.14
ATOM	7787	CB	ALA	1143	-10.087	-39.468	13.510	1.00	17.85
ATOM	7788	C	ALA	1143	-11.350	-38.240	11.716	1.00	16.90
ATOM	7789	O	ALA	1143	-12.525	-37.921	11.900	1.00	16.07
ATOM	7790	N	VAL	1144	-10.464	-37.449	11.115	1.00	16.80
ATOM	7791	CA	VAL	1144	-10.826	-36.135	10.603	1.00	17.64
ATOM	7792	CB	VAL	1144	-9.604	-35.412	9.989	1.00	17.57
ATOM	7793	CG1	VAL	1144	-10.050	-34.114	9.326	1.00	15.63
ATOM	7794	CG2	VAL	1144	-8.561	-35.116	11.078	1.00	15.39
ATOM	7795	C	VAL	1144	-11.900	-36.290	9.528	1.00	18.77
ATOM	7796	O	VAL	1144	-12.928	-35.615	9.560	1.00	17.83
ATOM	7797	N	ARG	1145	-11.656	-37.181	8.575	1.00	19.43
ATOM	7798	CA	ARG	1145	-12.619	-37.408	7.507	1.00	21.72
ATOM	7799	CB	ARG	1145	-12.079	-38.435	6.514	1.00	22.86
ATOM	7800	CG	ARG	1145	-10.907	-37.920	5.690	1.00	23.87
ATOM	7801	CD	ARG	1145	-10.570	-38.881	4.565	1.00	26.94
ATOM	7802	NE	ARG	1145	-10.060	-40.162	5.055	1.00	27.22
ATOM	7803	CZ	ARG	1145	-8.771	-40.448	5.207	1.00	26.31
ATOM	7804	NH1	ARG	1145	-7.846	-39.544	4.909	1.00	25.59
ATOM	7805	NH2	ARG	1145	-8.407	-41.646	5.639	1.00	27.26

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ATOM    7806  C    ARG   1145     -13.965 -37.865    8.050  1.00 22.32
ATOM    7807  O    ARG   1145     -15.010 -37.470    7.531  1.00 22.86
ATOM    7808  N    GLN   1146     -13.941 -38.685    9.098  1.00 21.32
ATOM    7809  CA   GLN   1146     -15.171 -39.190    9.701  1.00 22.69
ATOM    7810  CB   GLN   1146     -14.855 -40.318   10.691  1.00 24.27
ATOM    7811  CG   GLN   1146     -16.081 -41.095   11.161  1.00 29.43
ATOM    7812  CD   GLN   1146     -15.732 -42.213   12.132  1.00 34.61
ATOM    7813  OE1  GLN   1146     -14.892 -43.067   11.839  1.00 36.88
ATOM    7814  NE2  GLN   1146     -16.382 -42.216   13.293  1.00 35.93
ATOM    7815  C    GLN   1146     -15.918 -38.077   10.423  1.00 22.56
ATOM    7816  O    GLN   1146     -17.152 -38.048   10.448  1.00 19.62
ATOM    7817  N    TYR   1147     -15.167 -37.165   11.027  1.00 20.38
ATOM    7818  CA   TYR   1147     -15.774 -36.051   11.739  1.00 22.67
ATOM    7819  CB   TYR   1147     -14.690 -35.256   12.478  1.00 20.90
ATOM    7820  CG   TYR   1147     -15.136 -33.900   12.979  1.00 21.86
ATOM    7821  CD1  TYR   1147     -16.312 -33.756   13.721  1.00 20.32
ATOM    7822  CE1  TYR   1147     -16.718 -32.511   14.186  1.00 21.50
ATOM    7823  CD2  TYR   1147     -14.374 -32.759   12.719  1.00 20.91
ATOM    7824  CE2  TYR   1147     -14.769 -31.509   13.180  1.00 20.76
ATOM    7825  CZ   TYR   1147     -15.939 -31.389   13.910  1.00 22.56
ATOM    7826  OH   TYR   1147     -16.345 -30.152   14.358  1.00 21.72
ATOM    7827  C    TYR   1147     -16.509 -35.161   10.737  1.00 22.11
ATOM    7828  O    TYR   1147     -17.643 -34.752   10.969  1.00 23.56
ATOM    7829  N    MET   1148     -15.855 -34.881    9.618  1.00 22.47
ATOM    7830  CA   MET   1148     -16.441 -34.051    8.580  1.00 23.31
ATOM    7831  CB   MET   1148     -15.427 -33.835    7.459  1.00 24.14
ATOM    7832  CG   MET   1148     -14.182 -33.075    7.879  1.00 25.93
ATOM    7833  SD   MET   1148     -12.910 -33.130    6.619  1.00 28.97
ATOM    7834  CE   MET   1148     -13.585 -32.034    5.386  1.00 28.81
ATOM    7835  C    MET   1148     -17.701 -34.704    8.012  1.00 25.12
ATOM    7836  O    MET   1148     -18.743 -34.055    7.868  1.00 24.49
ATOM    7837  N    ALA   1149     -17.599 -35.992    7.700  1.00 24.17
ATOM    7838  CA   ALA   1149     -18.718 -36.747    7.133  1.00 24.28
ATOM    7839  CB   ALA   1149     -18.254 -38.152    6.750  1.00 23.46
ATOM    7840  C    ALA   1149     -19.914 -36.828    8.079  1.00 24.06
ATOM    7841  O    ALA   1149     -21.058 -36.613    7.669  1.00 23.40
ATOM    7842  N    GLU   1150     -19.657 -37.135    9.346  1.00 24.16
ATOM    7843  CA   GLU   1150     -20.739 -37.235   10.319  1.00 26.28
ATOM    7844  CB   GLU   1150     -20.228 -37.828   11.634  1.00 27.57
ATOM    7845  CG   GLU   1150     -20.156 -39.347   11.608  1.00 28.54
ATOM    7846  CD   GLU   1150     -19.614 -39.939   12.890  1.00 28.17
ATOM    7847  OE1  GLU   1150     -20.027 -39.506   13.984  1.00 28.42
ATOM    7848  OE2  GLU   1150     -18.778 -40.857   12.796  1.00 33.92
ATOM    7849  C    GLU   1150     -21.421 -35.900   10.581  1.00 26.66
ATOM    7850  O    GLU   1150     -22.597 -35.859   10.949  1.00 27.42
ATOM    7851  N    VAL   1151     -20.685 -34.808   10.408  1.00 27.27
ATOM    7852  CA   VAL   1151     -21.263 -33.486   10.617  1.00 27.27
ATOM    7853  CB   VAL   1151     -20.179 -32.384   10.668  1.00 27.12
ATOM    7854  CG1  VAL   1151     -20.835 -31.005   10.609  1.00 23.63
ATOM    7855  CG2  VAL   1151     -19.372 -32.512   11.945  1.00 23.64
ATOM    7856  C    VAL   1151     -22.242 -33.154    9.495  1.00 28.77
ATOM    7857  O    VAL   1151     -23.384 -32.777    9.749  1.00 28.71
ATOM    7858  N    GLU   1152     -21.792 -33.304    8.256  1.00 30.65
ATOM    7859  CA   GLU   1152     -22.637 -32.998    7.112  1.00 33.92
ATOM    7860  CB   GLU   1152     -21.836 -33.117    5.813  1.00 34.31
ATOM    7861  CG   GLU   1152     -22.641 -32.774    4.567  1.00 38.13
ATOM    7862  CD   GLU   1152     -21.775 -32.545    3.345  1.00 39.92
ATOM    7863  OE1  GLU   1152     -22.337 -32.401    2.240  1.00 43.20
ATOM    7864  OE2  GLU   1152     -20.535 -32.498    3.485  1.00 41.00
ATOM    7865  C    GLU   1152     -23.867 -33.895    7.051  1.00 34.76
ATOM    7866  O    GLU   1152     -24.942 -33.456    6.640  1.00 35.70
ATOM    7867  N    SER   1153     -23.709 -35.147    7.468  1.00 34.67
ATOM    7868  CA   SER   1153     -24.814 -36.102    7.456  1.00 34.62
ATOM    7869  CB   SER   1153     -24.284 -37.534    7.559  1.00 35.72
ATOM    7870  OG   SER   1153     -23.645 -37.926    6.357  1.00 39.86
ATOM    7871  C    SER   1153     -25.787 -35.852    8.596  1.00 32.97
ATOM    7872  O    SER   1153     -26.974 -36.157    8.487  1.00 33.54
ATOM    7873  N    GLY   1154     -25.280 -35.302    9.692  1.00 30.02
ATOM    7874  CA   GLY   1154     -26.130 -35.039   10.835  1.00 28.64
ATOM    7875  C    GLY   1154     -25.952 -36.090   11.912  1.00 27.31
ATOM    7876  O    GLY   1154     -26.491 -35.960   13.008  1.00 27.96
ATOM    7877  N    VAL   1155     -25.197 -37.140   11.599  1.00 27.21
ATOM    7878  CA   VAL   1155     -24.944 -38.208   12.558  1.00 27.30
ATOM    7879  CB   VAL   1155     -23.969 -39.252   11.984  1.00 27.92
ATOM    7880  CG1  VAL   1155     -23.728 -40.357   13.005  1.00 30.23
ATOM    7881  CG2  VAL   1155     -24.528 -39.828   10.692  1.00 31.88
ATOM    7882  C    VAL   1155     -24.333 -37.614   13.823  1.00 26.47
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ATOM   7884  N   TYR  1156    -23.485 -36.606  13.636  1.00 25.70
ATOM   7885  CA  TYR  1156    -22.828 -35.921  14.746  1.00 25.82
ATOM   7886  CB  TYR  1156    -21.307 -36.124  14.709  1.00 24.74
ATOM   7887  CG  TYR  1156    -20.605 -35.437  15.867  1.00 24.07
ATOM   7888  CD1 TYR  1156    -20.649 -35.976  17.156  1.00 23.28
ATOM   7889  CE1 TYR  1156    -20.078 -35.306  18.242  1.00 23.96
ATOM   7890  CD2 TYR  1156    -19.964 -34.213  15.690  1.00 24.41
ATOM   7891  CE2 TYR  1156    -19.392 -33.533  16.768  1.00 24.50
ATOM   7892  CZ  TYR  1156    -19.455 -34.083  18.041  1.00 24.23
ATOM   7893  OH  TYR  1156    -18.920 -33.395  19.112  1.00 23.15
ATOM   7894  C   TYR  1156    -23.116 -34.424  14.696  1.00 26.27
ATOM   7895  O   TYR  1156    -22.996 -33.799  13.642  1.00 26.36
ATOM   7896  N   PRO  1157    -23.471 -33.826  15.844  1.00 27.37
ATOM   7897  CD  PRO  1157    -23.555 -32.365  16.017  1.00 28.85
ATOM   7898  CA  PRO  1157    -23.600 -34.509  17.132  1.00 28.73
ATOM   7899  CB  PRO  1157    -23.499 -33.365  18.138  1.00 28.98
ATOM   7900  CG  PRO  1157    -24.117 -32.234  17.416  1.00 29.31
ATOM   7901  C   PRO  1157    -24.882 -35.319  17.290  1.00 30.00
ATOM   7902  O   PRO  1157    -25.928 -34.970  16.740  1.00 29.72
ATOM   7903  N   GLY  1158    -24.786 -36.409  18.046  1.00 30.34
ATOM   7904  CA  GLY  1158    -25.940 -37.257  18.278  1.00 31.69
ATOM   7905  C   GLY  1158    -26.668 -36.843  19.540  1.00 32.83
ATOM   7906  O   GLY  1158    -26.240 -35.921  20.234  1.00 31.48
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ATOM   7910  CG  GLU  1159    -30.853 -37.515  22.049  1.00 38.05
ATOM   7911  CD  GLU  1159    -31.472 -36.241  21.503  1.00 39.50
ATOM   7912  OE1 GLU  1159    -32.152 -35.527  22.269  1.00 41.54
ATOM   7913  OE2 GLU  1159    -31.282 -35.958  20.300  1.00 39.55
ATOM   7914  C   GLU  1159    -27.685 -37.403  22.283  1.00 35.20
ATOM   7915  O   GLU  1159    -27.943 -36.802  23.325  1.00 35.87
ATOM   7916  N   GLU  1160    -26.668 -38.256  22.167  1.00 35.14
ATOM   7917  CA  GLU  1160    -25.764 -38.545  23.277  1.00 35.10
ATOM   7918  CB  GLU  1160    -24.870 -39.748  22.951  1.00 37.43
ATOM   7919  CG  GLU  1160    -25.577 -40.902  22.261  1.00 41.76
ATOM   7920  CD  GLU  1160    -25.822 -40.638  20.789  1.00 42.93
ATOM   7921  OE1 GLU  1160    -24.834 -40.410  20.054  1.00 43.83
ATOM   7922  OE2 GLU  1160    -26.999 -40.666  20.368  1.00 43.38
ATOM   7923  C   GLU  1160    -24.862 -37.353  23.583  1.00 33.30
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ATOM   7925  N   HIS  1161    -24.777 -36.422  22.637  1.00 32.51
ATOM   7926  CA  HIS  1161    -23.930 -35.238  22.781  1.00 32.09
ATOM   7927  CB  HIS  1161    -23.016 -35.097  21.562  1.00 31.02
ATOM   7928  CG  HIS  1161    -22.355 -36.373  21.143  1.00 29.12
ATOM   7929  CD2 HIS  1161    -22.512 -37.131  20.032  1.00 27.73
ATOM   7930  ND1 HIS  1161    -21.407 -37.013  21.913  1.00 28.00
ATOM   7931  CE1 HIS  1161    -21.012 -38.112  21.296  1.00 27.95
ATOM   7932  NE2 HIS  1161    -21.667 -38.207  20.152  1.00 29.03
ATOM   7933  C   HIS  1161    -24.757 -33.965  22.899  1.00 33.71
ATOM   7934  O   HIS  1161    -24.212 -32.864  22.874  1.00 31.48
ATOM   7935  N   SER  1162    -26.069 -34.121  23.028  1.00 34.90
ATOM   7936  CA  SER  1162    -26.969 -32.981  23.107  1.00 36.32
ATOM   7937  CB  SER  1162    -28.088 -33.167  22.088  1.00 36.36
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ATOM   7939  C   SER  1162    -27.562 -32.748  24.492  1.00 37.54
ATOM   7940  O   SER  1162    -27.649 -33.670  25.303  1.00 37.53
ATOM   7941  N   PHE  1163    -27.969 -31.505  24.749  1.00 38.51
ATOM   7942  CA  PHE  1163    -28.563 -31.129  26.028  1.00 39.57
ATOM   7943  CB  PHE  1163    -27.764 -30.000  26.692  1.00 40.57
ATOM   7944  CG  PHE  1163    -26.323 -30.346  26.967  1.00 43.95
ATOM   7945  CD1 PHE  1163    -25.363 -30.253  25.961  1.00 44.75
ATOM   7946  CD2 PHE  1163    -25.926 -30.771  28.232  1.00 44.14
ATOM   7947  CE1 PHE  1163    -24.029 -30.575  26.213  1.00 45.36
ATOM   7948  CE2 PHE  1163    -24.595 -31.096  28.492  1.00 45.59
ATOM   7949  CZ  PHE  1163    -23.645 -30.998  27.480  1.00 44.94
ATOM   7950  C   PHE  1163    -30.007 -30.676  25.838  1.00 39.51
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ATOM   7955  CG  HIS  1164    -32.963 -32.071  25.504  1.00 37.46
ATOM   7956  CD2 HIS  1164    -32.563 -33.329  25.201  1.00 36.29
ATOM   7957  ND1 HIS  1164    -33.293 -31.476  24.305  1.00 36.11
ATOM   7958  CE1 HIS  1164    -33.100 -32.336  23.321  1.00 34.87
ATOM   7959  NE2 HIS  1164    -32.657 -33.468  23.837  1.00 34.05
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ATOM   7969  O2  KPL  1165   -14.027 -21.380  22.384  1.00 34.78
ATOM   7970  C6  KPL  1165   -12.093 -22.661  22.058  1.00 32.52
ATOM   7971  O3  KPL  1165   -11.604 -23.720  21.736  1.00 31.95
ATOM   7972  O4  KPL  1165   -11.288 -21.651  22.419  1.00 28.43
ATOM   7973  CB  MET  1201   -15.474 -28.638  47.750  1.00 74.61
ATOM   7974  CG  MET  1201   -16.080 -29.937  48.288  1.00 76.04
ATOM   7975  SD  MET  1201   -15.715 -31.415  47.313  1.00 77.75
ATOM   7976  CE  MET  1201   -17.296 -31.664  46.480  1.00 77.07
ATOM   7977  C   MET  1201   -15.060 -28.920  45.290  1.00 71.84
ATOM   7978  O   MET  1201   -13.988 -29.442  45.601  1.00 72.20
ATOM   7979  N   MET  1201   -17.380 -28.524  46.164  1.00 73.50
ATOM   7980  CA  MET  1201   -15.929 -28.231  46.340  1.00 73.03
ATOM   7981  N   LYS  1202   -15.525 -28.905  44.043  1.00 69.78
ATOM   7982  CA  LYS  1202   -14.795 -29.524  42.940  1.00 67.53
ATOM   7983  CB  LYS  1202   -15.523 -30.791  42.469  1.00 68.57
ATOM   7984  CG  LYS  1202   -15.422 -31.977  43.422  1.00 69.98
ATOM   7985  CD  LYS  1202   -14.031 -32.611  43.409  1.00 70.39
ATOM   7986  CE  LYS  1202   -13.781 -33.424  42.140  1.00 70.57
ATOM   7987  NZ  LYS  1202   -13.778 -32.606  40.895  1.00 70.61
ATOM   7988  C   LYS  1202   -14.609 -28.580  41.752  1.00 64.73
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ATOM   7990  N   PRO  1203   -13.973 -27.414  41.973  1.00 61.55
ATOM   7991  CD  PRO  1203   -13.472 -26.591  40.856  1.00 60.49
ATOM   7992  CA  PRO  1203   -13.433 -26.929  43.248  1.00 58.33
ATOM   7993  CB  PRO  1203   -12.232 -26.108  42.802  1.00 58.95
ATOM   7994  CG  PRO  1203   -12.755 -25.453  41.571  1.00 59.90
ATOM   7995  C   PRO  1203   -14.454 -26.086  44.018  1.00 55.17
ATOM   7996  O   PRO  1203   -15.641 -26.081  43.689  1.00 55.08
ATOM   7997  N   THR  1204   -13.987 -25.372  45.039  1.00 50.88
ATOM   7998  CA  THR  1204   -14.863 -24.522  45.843  1.00 46.61
ATOM   7999  CB  THR  1204   -14.165 -24.061  47.140  1.00 46.19
ATOM   8000  OG1 THR  1204   -13.702 -25.204  47.870  1.00 46.22
ATOM   8001  CG2 THR  1204   -15.131 -23.273  48.009  1.00 45.19
ATOM   8002  C   THR  1204   -15.240 -23.288  45.026  1.00 43.63
ATOM   8003  O   THR  1204   -14.373 -22.642  44.440  1.00 42.49
ATOM   8004  N   THR  1205   -16.531 -22.966  44.985  1.00 40.26
ATOM   8005  CA  THR  1205   -17.000 -21.811  44.222  1.00 37.82
ATOM   8006  CB  THR  1205   -17.760 -22.241  42.953  1.00 38.23
ATOM   8007  OG1 THR  1205   -18.955 -22.937  43.330  1.00 39.06
ATOM   8008  CG2 THR  1205   -16.893 -23.142  42.089  1.00 39.20
ATOM   8009  C   THR  1205   -17.924 -20.887  45.002  1.00 35.47
ATOM   8010  O   THR  1205   -18.360 -21.201  46.111  1.00 34.25
ATOM   8011  N   ILE  1206   -18.226 -19.744  44.397  1.00 33.47
ATOM   8012  CA  ILE  1206   -19.104 -18.761  45.010  1.00 34.02
ATOM   8013  CB  ILE  1206   -19.263 -17.528  44.107  1.00 34.29
ATOM   8014  CG2 ILE  1206   -20.055 -16.455  44.834  1.00 33.15
ATOM   8015  CG1 ILE  1206   -17.880 -16.986  43.728  1.00 36.56
ATOM   8016  CD1 ILE  1206   -17.908 -15.950  42.616  1.00 36.92
ATOM   8017  C   ILE  1206   -20.481 -19.368  45.266  1.00 33.47
ATOM   8018  O   ILE  1206   -21.119 -19.080  46.280  1.00 33.95
ATOM   8019  N   SER  1207   -20.933 -20.218  44.350  1.00 33.47
ATOM   8020  CA  SER  1207   -22.236 -20.861  44.494  1.00 34.07
ATOM   8021  CB  SER  1207   -22.515 -21.766  43.292  1.00 34.94
ATOM   8022  OG  SER  1207   -22.693 -21.001  42.111  1.00 37.78
ATOM   8023  C   SER  1207   -22.310 -21.678  45.777  1.00 33.33
ATOM   8024  O   SER  1207   -23.392 -21.899  46.319  1.00 34.33
ATOM   8025  N   LEU  1208   -21.152 -22.121  46.259  1.00 32.96
ATOM   8026  CA  LEU  1208   -21.086 -22.919  47.477  1.00 32.87
ATOM   8027  CB  LEU  1208   -19.676 -23.496  47.651  1.00 34.16
ATOM   8028  CG  LEU  1208   -19.539 -24.923  48.189  1.00 35.32
ATOM   8029  CD1 LEU  1208   -18.071 -25.215  48.489  1.00 34.07
ATOM   8030  CD2 LEU  1208   -20.368 -25.092  49.440  1.00 34.02
ATOM   8031  C   LEU  1208   -21.444 -22.062  48.687  1.00 31.67
ATOM   8032  O   LEU  1208   -22.198 -22.488  49.563  1.00 30.68
ATOM   8033  N   LEU  1209   -20.902 -20.848  48.728  1.00 29.45
ATOM   8034  CA  LEU  1209   -21.158 -19.934  49.834  1.00 28.92
ATOM   8035  CB  LEU  1209   -20.185 -18.753  49.772  1.00 25.98
ATOM   8036  CG  LEU  1209   -18.698 -19.117  49.742  1.00 25.45
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ATOM    8037  CD1 LEU  1209     -17.859 -17.844  49.746  1.00 22.70
ATOM    8038  CD2 LEU  1209     -18.356 -19.975  50.947  1.00 23.49
ATOM    8039  C   LEU  1209     -22.595 -19.425  49.802  1.00 29.02
ATOM    8040  O   LEU  1209     -23.207 -19.198  50.844  1.00 28.22
ATOM    8041  N   GLN  1210     -23.126 -19.239  48.598  1.00 30.69
ATOM    8042  CA  GLN  1210     -24.497 -18.763  48.436  1.00 32.68
ATOM    8043  CB  GLN  1210     -24.777 -18.499  46.954  1.00 32.40
ATOM    8044  CG  GLN  1210     -26.138 -17.885  46.648  1.00 33.66
ATOM    8045  CD  GLN  1210     -26.378 -16.573  47.372  1.00 33.08
ATOM    8046  OE1 GLN  1210     -26.857 -16.553  48.506  1.00 33.39
ATOM    8047  NE2 GLN  1210     -26.037 -15.467  46.722  1.00 31.00
ATOM    8048  C   GLN  1210     -25.436 -19.831  48.994  1.00 33.63
ATOM    8049  O   GLN  1210     -26.437 -19.520  49.643  1.00 34.19
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ATOM    8051  CA  LYS  1211     -25.888 -22.212  49.247  1.00 37.75
ATOM    8052  CB  LYS  1211     -25.367 -23.533  48.670  1.00 39.41
ATOM    8053  CG  LYS  1211     -25.864 -24.766  49.413  1.00 43.61
ATOM    8054  CD  LYS  1211     -25.471 -26.064  48.717  1.00 46.26
ATOM    8055  CE  LYS  1211     -26.318 -26.314  47.477  1.00 47.80
ATOM    8056  NZ  LYS  1211     -26.008 -27.629  46.849  1.00 49.02
ATOM    8057  C   LYS  1211     -25.833 -22.258  50.775  1.00 38.19
ATOM    8058  O   LYS  1211     -26.822 -22.579  51.434  1.00 37.83
ATOM    8059  N   TYR  1212     -24.673 -21.930  51.334  1.00 37.94
ATOM    8060  CA  TYR  1212     -24.493 -21.933  52.781  1.00 38.24
ATOM    8061  CB  TYR  1212     -23.032 -21.643  53.128  1.00 39.33
ATOM    8062  CG  TYR  1212     -22.101 -22.817  52.936  1.00 41.48
ATOM    8063  CD1 TYR  1212     -20.724 -22.623  52.830  1.00 43.21
ATOM    8064  CE1 TYR  1212     -19.854 -23.698  52.690  1.00 44.20
ATOM    8065  CD2 TYR  1212     -22.587 -24.125  52.897  1.00 42.82
ATOM    8066  CE2 TYR  1212     -21.724 -25.210  52.759  1.00 44.18
ATOM    8067  CZ  TYR  1212     -20.360 -24.987  52.657  1.00 44.87
ATOM    8068  OH  TYR  1212     -19.496 -26.048  52.522  1.00 46.35
ATOM    8069  C   TYR  1212     -25.388 -20.922  53.485  1.00 37.78
ATOM    8070  O   TYR  1212     -25.946 -21.211  54.544  1.00 36.95
ATOM    8071  N   LYS  1213     -25.514 -19.731  52.906  1.00 37.50
ATOM    8072  CA  LYS  1213     -26.348 -18.695  53.506  1.00 37.53
ATOM    8073  CB  LYS  1213     -26.256 -17.387  52.707  1.00 35.24
ATOM    8074  CG  LYS  1213     -27.168 -16.292  53.248  1.00 31.66
ATOM    8075  CD  LYS  1213     -26.732 -14.894  52.831  1.00 27.83
ATOM    8076  CE  LYS  1213     -27.589 -13.850  53.530  1.00 25.23
ATOM    8077  NZ  LYS  1213     -27.068 -12.467  53.408  1.00 24.51
ATOM    8078  C   LYS  1213     -27.803 -19.146  53.591  1.00 39.33
ATOM    8079  O   LYS  1213     -28.451 -18.980  54.624  1.00 39.00
ATOM    8080  N   GLN  1214     -28.312 -19.717  52.505  1.00 40.82
ATOM    8081  CA  GLN  1214     -29.689 -20.190  52.481  1.00 43.81
ATOM    8082  CB  GLN  1214     -30.060 -20.692  51.084  1.00 45.23
ATOM    8083  CG  GLN  1214     -30.123 -19.591  50.037  1.00 48.26
ATOM    8084  CD  GLN  1214     -30.583 -20.097  48.684  1.00 50.37
ATOM    8085  OE1 GLN  1214     -31.663 -20.683  48.561  1.00 52.18
ATOM    8086  NE2 GLN  1214     -29.767 -19.870  47.656  1.00 50.33
ATOM    8087  C   GLN  1214     -29.889 -21.302  53.501  1.00 44.29
ATOM    8088  O   GLN  1214     -30.948 -21.406  54.118  1.00 44.96
ATOM    8089  N   GLU  1215     -28.862 -22.126  53.683  1.00 45.06
ATOM    8090  CA  GLU  1215     -28.934 -23.229  54.633  1.00 45.32
ATOM    8091  CB  GLU  1215     -27.960 -24.343  54.241  1.00 46.90
ATOM    8092  CG  GLU  1215     -28.102 -24.843  52.815  1.00 49.76
ATOM    8093  CD  GLU  1215     -27.175 -26.008  52.522  1.00 51.37
ATOM    8094  OE1 GLU  1215     -25.983 -25.927  52.888  1.00 52.64
ATOM    8095  OE2 GLU  1215     -27.635 -27.000  51.920  1.00 52.49
ATOM    8096  C   GLU  1215     -28.597 -22.744  56.036  1.00 44.97
ATOM    8097  O   GLU  1215     -28.513 -23.541  56.969  1.00 44.92
ATOM    8098  N   LYS  1216     -28.400 -21.437  56.182  1.00 44.76
ATOM    8099  CA  LYS  1216     -28.069 -20.852  57.479  1.00 43.95
ATOM    8100  CB  LYS  1216     -29.252 -21.001  58.442  1.00 45.68
ATOM    8101  CG  LYS  1216     -30.481 -20.179  58.071  1.00 48.07
ATOM    8102  CD  LYS  1216     -30.234 -18.687  58.255  1.00 49.08
ATOM    8103  CE  LYS  1216     -31.475 -17.871  57.914  1.00 50.43
ATOM    8104  NZ  LYS  1216     -32.654 -18.265  58.740  1.00 51.79
ATOM    8105  C   LYS  1216     -26.829 -21.509  58.085  1.00 42.80
ATOM    8106  O   LYS  1216     -26.763 -21.741  59.296  1.00 42.94
ATOM    8107  N   LYS  1217     -25.850 -21.813  57.239  1.00 40.87
ATOM    8108  CA  LYS  1217     -24.613 -22.444  57.693  1.00 39.09
ATOM    8109  CB  LYS  1217     -24.290 -23.667  56.830  1.00 39.84
ATOM    8110  CG  LYS  1217     -22.929 -24.284  57.143  1.00 42.69
ATOM    8111  CD  LYS  1217     -22.622 -25.474  56.250  1.00 45.14
ATOM    8112  CE  LYS  1217     -23.542 -26.651  56.546  1.00 47.62
ATOM    8113  NZ  LYS  1217     -23.209 -27.838  55.706  1.00 48.86
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ATOM	8114	C	LYS	1217	-23.439	-21.471	57.646	1.00	36.74
ATOM	8115	O	LYS	1217	-22.930	-21.156	56.573	1.00	37.26
ATOM	8116	N	ARG	1218	-23.008	-21.003	58.812	1.00	33.47
ATOM	8117	CA	ARG	1218	-21.892	-20.069	58.890	1.00	31.52
ATOM	8118	CB	ARG	1218	-21.799	-19.498	60.309	1.00	32.55
ATOM	8119	CG	ARG	1218	-22.894	-18.476	60.603	1.00	31.60
ATOM	8120	CD	ARG	1218	-22.918	-18.029	62.052	1.00	33.28
ATOM	8121	NE	ARG	1218	-23.699	-18.938	62.890	1.00	33.49
ATOM	8122	CZ	ARG	1218	-24.049	-18.678	64.145	1.00	32.58
ATOM	8123	NH1	ARG	1218	-23.688	-17.537	64.716	1.00	33.26
ATOM	8124	NH2	ARG	1218	-24.767	-19.554	64.828	1.00	34.35
ATOM	8125	C	ARG	1218	-20.578	-20.737	58.476	1.00	30.31
ATOM	8126	O	ARG	1218	-20.223	-21.797	58.990	1.00	31.64
ATOM	8127	N	PHE	1219	-19.864	-20.112	57.543	1.00	28.09
ATOM	8128	CA	PHE	1219	-18.607	-20.656	57.038	1.00	24.32
ATOM	8129	CB	PHE	1219	-18.701	-20.816	55.518	1.00	23.44
ATOM	8130	CG	PHE	1219	-19.005	-19.537	54.794	1.00	22.44
ATOM	8131	CD1	PHE	1219	-17.975	-18.711	54.343	1.00	21.27
ATOM	8132	CD2	PHE	1219	-20.321	-19.131	54.606	1.00	22.38
ATOM	8133	CE1	PHE	1219	-18.253	-17.495	53.719	1.00	20.07
ATOM	8134	CE2	PHE	1219	-20.612	-17.918	53.983	1.00	20.42
ATOM	8135	CZ	PHE	1219	-19.575	-17.098	53.539	1.00	22.14
ATOM	8136	C	PHE	1219	-17.384	-19.811	57.411	1.00	24.16
ATOM	8137	O	PHE	1219	-17.476	-18.588	57.576	1.00	20.50
ATOM	8138	N	ALA	1220	-16.238	-20.474	57.541	1.00	23.05
ATOM	8139	CA	ALA	1220	-14.992	-19.801	57.908	1.00	23.62
ATOM	8140	CB	ALA	1220	-14.195	-20.681	58.867	1.00	23.36
ATOM	8141	C	ALA	1220	-14.134	-19.450	56.698	1.00	20.64
ATOM	8142	O	ALA	1220	-14.081	-20.197	55.729	1.00	20.76
ATOM	8143	N	THR	1221	-13.462	-18.309	56.773	1.00	20.56
ATOM	8144	CA	THR	1221	-12.593	-17.846	55.700	1.00	21.27
ATOM	8145	CB	THR	1221	-13.248	-16.670	54.950	1.00	22.71
ATOM	8146	OG1	THR	1221	-14.532	-17.084	54.456	1.00	25.31
ATOM	8147	CG2	THR	1221	-12.391	-16.229	53.790	1.00	26.49
ATOM	8148	C	THR	1221	-11.271	-17.393	56.329	1.00	20.19
ATOM	8149	O	THR	1221	-11.225	-17.055	57.515	1.00	19.48
ATOM	8150	N	ILE	1222	-10.192	-17.369	55.552	1.00	20.17
ATOM	8151	CA	ILE	1222	-8.912	-16.975	56.129	1.00	18.40
ATOM	8152	CB	ILE	1222	-8.229	-18.211	56.779	1.00	19.49
ATOM	8153	CG2	ILE	1222	-7.614	-19.105	55.696	1.00	20.26
ATOM	8154	CG1	ILE	1222	-7.184	-17.753	57.794	1.00	21.68
ATOM	8155	CD1	ILE	1222	-6.591	-18.886	58.621	1.00	25.50
ATOM	8156	C	ILE	1222	-7.972	-16.338	55.115	1.00	18.20
ATOM	8157	O	ILE	1222	-8.138	-16.510	53.910	1.00	17.49
ATOM	8158	N	THR	1223	-6.998	-15.575	55.602	1.00	19.22
ATOM	8159	CA	THR	1223	-6.049	-14.950	54.695	1.00	19.12
ATOM	8160	CB	THR	1223	-5.544	-13.590	55.210	1.00	19.60
ATOM	8161	OG1	THR	1223	-4.681	-13.785	56.332	1.00	20.12
ATOM	8162	CG2	THR	1223	-6.719	-12.709	55.625	1.00	23.60
ATOM	8163	C	THR	1223	-4.870	-15.900	54.524	1.00	16.85
ATOM	8164	O	THR	1223	-4.588	-16.719	55.398	1.00	16.75
ATOM	8165	N	ALA	1224	-4.196	-15.801	53.386	1.00	16.57
ATOM	8166	CA	ALA	1224	-3.042	-16.643	53.098	1.00	16.77
ATOM	8167	CB	ALA	1224	-3.494	-17.980	52.530	1.00	16.53
ATOM	8168	C	ALA	1224	-2.181	-15.886	52.099	1.00	15.47
ATOM	8169	O	ALA	1224	-2.704	-15.171	51.243	1.00	13.50
ATOM	8170	N	TYR	1225	-0.864	-16.043	52.203	1.00	13.85
ATOM	8171	CA	TYR	1225	0.043	-15.321	51.318	1.00	14.02
ATOM	8172	CB	TYR	1225	0.616	-14.088	52.033	1.00	16.12
ATOM	8173	CG	TYR	1225	-0.361	-13.344	52.918	1.00	16.49
ATOM	8174	CD1	TYR	1225	-0.398	-13.577	54.293	1.00	17.47
ATOM	8175	CE1	TYR	1225	-1.295	-12.901	55.118	1.00	19.34
ATOM	8176	CD2	TYR	1225	-1.250	-12.411	52.382	1.00	16.05
ATOM	8177	CE2	TYR	1225	-2.155	-11.728	53.197	1.00	17.27
ATOM	8178	CZ	TYR	1225	-2.170	-11.982	54.566	1.00	17.92
ATOM	8179	OH	TYR	1225	-3.073	-11.324	55.374	1.00	18.55
ATOM	8180	C	TYR	1225	1.204	-16.158	50.807	1.00	15.21
ATOM	8181	O	TYR	1225	2.120	-15.630	50.183	1.00	16.68
ATOM	8182	N	ASP	1226	1.173	-17.458	51.071	1.00	14.35
ATOM	8183	CA	ASP	1226	2.251	-18.321	50.620	1.00	14.15
ATOM	8184	CB	ASP	1226	3.420	-18.262	51.615	1.00	12.62
ATOM	8185	CG	ASP	1226	3.067	-18.827	52.983	1.00	15.38
ATOM	8186	OD1	ASP	1226	2.953	-20.064	53.099	1.00	14.85
ATOM	8187	OD2	ASP	1226	2.912	-18.025	53.933	1.00	15.68
ATOM	8188	C	ASP	1226	1.771	-19.749	50.435	1.00	14.71
ATOM	8189	O	ASP	1226	0.672	-20.113	50.864	1.00	13.48
ATOM	8190	N	TYR	1227	2.604	-20.548	49.780	1.00	13.68

ATOM	8191	CA	TYR	1227	2.312	-21.944	49.490	1.00	12.77
ATOM	8192	CB	TYR	1227	3.454	-22.526	48.657	1.00	13.53
ATOM	8193	CG	TYR	1227	3.407	-24.026	48.496	1.00	14.63
ATOM	8194	CD1	TYR	1227	2.642	-24.611	47.487	1.00	15.74
ATOM	8195	CE1	TYR	1227	2.594	-25.990	47.324	1.00	16.62
ATOM	8196	CD2	TYR	1227	4.128	-24.864	49.351	1.00	17.93
ATOM	8197	CE2	TYR	1227	4.087	-26.250	49.198	1.00	16.82
ATOM	8198	CZ	TYR	1227	3.325	-26.805	48.188	1.00	19.67
ATOM	8199	OH	TYR	1227	3.296	-28.172	48.016	1.00	20.34
ATOM	8200	C	TYR	1227	2.104	-22.826	50.721	1.00	14.61
ATOM	8201	O	TYR	1227	1.169	-23.631	50.770	1.00	13.84
ATOM	8202	N	SER	1228	2.985	-22.677	51.704	1.00	15.14
ATOM	8203	CA	SER	1228	2.932	-23.488	52.915	1.00	17.24
ATOM	8204	CB	SER	1228	4.115	-23.150	53.821	1.00	17.68
ATOM	8205	OG	SER	1228	5.330	-23.536	53.206	1.00	20.49
ATOM	8206	C	SER	1228	1.637	-23.402	53.704	1.00	16.77
ATOM	8207	O	SER	1228	1.012	-24.425	53.989	1.00	17.76
ATOM	8208	N	PHE	1229	1.233	-22.194	54.070	1.00	17.16
ATOM	8209	CA	PHE	1229	-0.001	-22.054	54.822	1.00	16.83
ATOM	8210	CB	PHE	1229	-0.100	-20.663	55.456	1.00	17.59
ATOM	8211	CG	PHE	1229	0.713	-20.521	56.714	1.00	17.48
ATOM	8212	CD1	PHE	1229	1.969	-19.927	56.690	1.00	19.55
ATOM	8213	CD2	PHE	1229	0.239	-21.041	57.916	1.00	20.98
ATOM	8214	CE1	PHE	1229	2.749	-19.852	57.844	1.00	19.23
ATOM	8215	CE2	PHE	1229	1.009	-20.974	59.076	1.00	21.94
ATOM	8216	CZ	PHE	1229	2.267	-20.378	59.038	1.00	20.88
ATOM	8217	C	PHE	1229	-1.226	-22.352	53.965	1.00	16.51
ATOM	8218	O	PHE	1229	-2.190	-22.929	54.452	1.00	16.61
ATOM	8219	N	ALA	1230	-1.198	-21.972	52.691	1.00	15.96
ATOM	8220	CA	ALA	1230	-2.340	-22.247	51.822	1.00	17.17
ATOM	8221	CB	ALA	1230	-2.103	-21.654	50.425	1.00	15.08
ATOM	8222	C	ALA	1230	-2.576	-23.755	51.723	1.00	17.32
ATOM	8223	O	ALA	1230	-3.715	-24.216	51.757	1.00	18.17
ATOM	8224	N	LYS	1231	-1.493	-24.518	51.600	1.00	17.85
ATOM	8225	CA	LYS	1231	-1.577	-25.971	51.493	1.00	18.56
ATOM	8226	CB	LYS	1231	-0.186	-26.546	51.201	1.00	19.63
ATOM	8227	CG	LYS	1231	-0.100	-28.073	51.122	1.00	23.84
ATOM	8228	CD	LYS	1231	-0.869	-28.632	49.940	1.00	29.01
ATOM	8229	CE	LYS	1231	-0.484	-30.086	49.634	1.00	31.79
ATOM	8230	NZ	LYS	1231	-0.862	-31.058	50.706	1.00	35.95
ATOM	8231	C	LYS	1231	-2.127	-26.564	52.789	1.00	17.93
ATOM	8232	O	LYS	1231	-2.990	-27.445	52.767	1.00	19.83
ATOM	8233	N	LEU	1232	-1.626	-26.072	53.916	1.00	19.47
ATOM	8234	CA	LEU	1232	-2.063	-26.557	55.219	1.00	18.49
ATOM	8235	CB	LEU	1232	-1.265	-25.861	56.324	1.00	20.15
ATOM	8236	CG	LEU	1232	-1.474	-26.366	57.758	1.00	20.23
ATOM	8237	CD1	LEU	1232	-0.235	-26.105	58.581	1.00	20.74
ATOM	8238	CD2	LEU	1232	-2.691	-25.670	58.358	1.00	20.65
ATOM	8239	C	LEU	1232	-3.566	-26.318	55.394	1.00	19.99
ATOM	8240	O	LEU	1232	-4.311	-27.227	55.777	1.00	19.78
ATOM	8241	N	PHE	1233	-4.013	-25.102	55.095	1.00	18.10
ATOM	8242	CA	PHE	1233	-5.430	-24.775	55.222	1.00	20.73
ATOM	8243	CB	PHE	1233	-5.701	-23.309	54.844	1.00	18.29
ATOM	8244	CG	PHE	1233	-4.957	-22.306	55.680	1.00	18.77
ATOM	8245	CD1	PHE	1233	-4.606	-22.591	56.996	1.00	18.49
ATOM	8246	CD2	PHE	1233	-4.628	-21.061	55.156	1.00	17.61
ATOM	8247	CE1	PHE	1233	-3.940	-21.652	57.769	1.00	17.42
ATOM	8248	CE2	PHE	1233	-3.961	-20.117	55.926	1.00	15.70
ATOM	8249	CZ	PHE	1233	-3.618	-20.413	57.233	1.00	17.50
ATOM	8250	C	PHE	1233	-6.278	-25.676	54.336	1.00	21.36
ATOM	8251	O	PHE	1233	-7.299	-26.215	54.775	1.00	22.69
ATOM	8252	N	ALA	1234	-5.859	-25.840	53.084	1.00	21.60
ATOM	8253	CA	ALA	1234	-6.601	-26.679	52.147	1.00	21.61
ATOM	8254	CB	ALA	1234	-5.960	-26.612	50.758	1.00	21.86
ATOM	8255	C	ALA	1234	-6.709	-28.133	52.612	1.00	23.65
ATOM	8256	O	ALA	1234	-7.759	-28.758	52.460	1.00	19.72
ATOM	8257	N	ASP	1235	-5.634	-28.675	53.179	1.00	23.15
ATOM	8258	CA	ASP	1235	-5.674	-30.061	53.646	1.00	26.64
ATOM	8259	CB	ASP	1235	-4.264	-30.577	53.973	1.00	26.19
ATOM	8260	CG	ASP	1235	-3.330	-30.562	52.767	1.00	30.30
ATOM	8261	OD1	ASP	1235	-3.758	-30.941	51.657	1.00	29.31
ATOM	8262	OD2	ASP	1235	-2.153	-30.185	52.941	1.00	30.67
ATOM	8263	C	ASP	1235	-6.561	-30.216	54.884	1.00	25.67
ATOM	8264	O	ASP	1235	-6.896	-31.333	55.275	1.00	27.41
ATOM	8265	N	GLU	1236	-6.935	-29.098	55.500	1.00	26.80
ATOM	8266	CA	GLU	1236	-7.779	-29.131	56.693	1.00	28.17
ATOM	8267	CB	GLU	1236	-7.236	-28.167	57.749	1.00	28.31

ATOM	8268	CG	GLU	1236	-5.900	-28.583	58.322	1.00	30.31
ATOM	8269	CD	GLU	1236	-5.947	-29.977	58.913	1.00	30.97
ATOM	8270	OE1	GLU	1236	-6.872	-30.252	59.709	1.00	32.20
ATOM	8271	OE2	GLU	1236	-5.066	-30.797	58.587	1.00	34.13
ATOM	8272	C	GLU	1236	-9.242	-28.805	56.407	1.00	29.14
ATOM	8273	O	GLU	1236	-10.098	-28.956	57.277	1.00	29.70
ATOM	8274	N	GLY	1237	-9.531	-28.348	55.194	1.00	28.96
ATOM	8275	CA	GLY	1237	-10.908	-28.032	54.863	1.00	30.43
ATOM	8276	C	GLY	1237	-11.165	-26.570	54.567	1.00	29.93
ATOM	8277	O	GLY	1237	-12.165	-26.248	53.937	1.00	32.59
ATOM	8278	N	LEU	1238	-10.286	-25.684	55.033	1.00	28.83
ATOM	8279	CA	LEU	1238	-10.449	-24.257	54.771	1.00	28.65
ATOM	8280	CB	LEU	1238	-9.434	-23.438	55.568	1.00	28.60
ATOM	8281	CG	LEU	1238	-9.946	-22.829	56.866	1.00	30.97
ATOM	8282	CD1	LEU	1238	-8.833	-22.052	57.548	1.00	29.17
ATOM	8283	CD2	LEU	1238	-11.130	-21.918	56.559	1.00	30.61
ATOM	8284	C	LEU	1238	-10.225	-24.039	53.283	1.00	26.94
ATOM	8285	O	LEU	1238	-9.085	-23.949	52.835	1.00	27.39
ATOM	8286	N	ASN	1239	-11.313	-23.948	52.523	1.00	24.94
ATOM	8287	CA	ASN	1239	-11.206	-23.782	51.080	1.00	24.45
ATOM	8288	CB	ASN	1239	-12.093	-24.803	50.369	1.00	26.67
ATOM	8289	CG	ASN	1239	-11.838	-26.213	50.844	1.00	29.98
ATOM	8290	OD1	ASN	1239	-10.690	-26.664	50.903	1.00	31.35
ATOM	8291	ND2	ASN	1239	-12.905	-26.924	51.188	1.00	33.26
ATOM	8292	C	ASN	1239	-11.527	-22.391	50.573	1.00	22.89
ATOM	8293	O	ASN	1239	-11.763	-22.201	49.382	1.00	24.50
ATOM	8294	N	VAL	1240	-11.545	-21.420	51.475	1.00	21.81
ATOM	8295	CA	VAL	1240	-11.806	-20.039	51.086	1.00	19.80
ATOM	8296	CB	VAL	1240	-13.137	-19.519	51.629	1.00	20.14
ATOM	8297	CG1	VAL	1240	-13.358	-18.098	51.141	1.00	18.87
ATOM	8298	CG2	VAL	1240	-14.263	-20.413	51.176	1.00	17.75
ATOM	8299	C	VAL	1240	-10.691	-19.190	51.663	1.00	19.46
ATOM	8300	O	VAL	1240	-10.632	-18.960	52.868	1.00	18.98
ATOM	8301	N	MET	1241	-9.811	-18.719	50.788	1.00	18.30
ATOM	8302	CA	MET	1241	-8.678	-17.922	51.210	1.00	17.27
ATOM	8303	CB	MET	1241	-7.382	-18.672	50.927	1.00	17.64
ATOM	8304	CG	MET	1241	-7.204	-19.922	51.769	1.00	18.74
ATOM	8305	SD	MET	1241	-5.840	-20.926	51.216	1.00	19.35
ATOM	8306	CE	MET	1241	-6.619	-22.510	51.062	1.00	19.09
ATOM	8307	C	MET	1241	-8.629	-16.583	50.521	1.00	16.92
ATOM	8308	O	MET	1241	-8.975	-16.469	49.348	1.00	16.62
ATOM	8309	N	LEU	1242	-8.171	-15.571	51.249	1.00	16.36
ATOM	8310	CA	LEU	1242	-8.069	-14.233	50.694	1.00	17.87
ATOM	8311	CB	LEU	1242	-8.950	-13.270	51.501	1.00	19.81
ATOM	8312	CG	LEU	1242	-9.047	-11.757	51.253	1.00	23.91
ATOM	8313	CD1	LEU	1242	-7.919	-11.072	51.987	1.00	25.91
ATOM	8314	CD2	LEU	1242	-9.038	-11.402	49.770	1.00	21.85
ATOM	8315	C	LEU	1242	-6.625	-13.759	50.682	1.00	16.01
ATOM	8316	O	LEU	1242	-5.911	-13.860	51.679	1.00	14.63
ATOM	8317	N	VAL	1243	-6.202	-13.259	49.529	1.00	16.58
ATOM	8318	CA	VAL	1243	-4.859	-12.724	49.381	1.00	15.62
ATOM	8319	CB	VAL	1243	-4.233	-13.152	48.046	1.00	15.84
ATOM	8320	CG1	VAL	1243	-2.801	-12.644	47.954	1.00	15.84
ATOM	8321	CG2	VAL	1243	-4.274	-14.668	47.923	1.00	17.35
ATOM	8322	C	VAL	1243	-5.086	-11.223	49.413	1.00	15.28
ATOM	8323	O	VAL	1243	-5.272	-10.590	48.376	1.00	14.94
ATOM	8324	N	GLY	1244	-5.085	-10.662	50.622	1.00	16.14
ATOM	8325	CA	GLY	1244	-5.351	-9.244	50.780	1.00	18.27
ATOM	8326	C	GLY	1244	-4.156	-8.347	50.980	1.00	16.28
ATOM	8327	O	GLY	1244	-3.061	-8.815	51.306	1.00	14.05
ATOM	8328	N	ASP	1245	-4.368	-7.046	50.798	1.00	17.20
ATOM	8329	CA	ASP	1245	-3.276	-6.105	50.957	1.00	17.71
ATOM	8330	CB	ASP	1245	-3.620	-4.728	50.369	1.00	17.04
ATOM	8331	CG	ASP	1245	-4.889	-4.121	50.952	1.00	16.86
ATOM	8332	OD1	ASP	1245	-5.415	-4.640	51.951	1.00	16.51
ATOM	8333	OD2	ASP	1245	-5.338	-3.111	50.384	1.00	17.00
ATOM	8334	C	ASP	1245	-2.837	-5.978	52.404	1.00	16.69
ATOM	8335	O	ASP	1245	-1.944	-5.202	52.715	1.00	15.57
ATOM	8336	N	SER	1246	-3.471	-6.736	53.291	1.00	16.51
ATOM	8337	CA	SER	1246	-3.050	-6.722	54.685	1.00	18.08
ATOM	8338	CB	SER	1246	-3.963	-7.606	55.539	1.00	17.32
ATOM	8339	OG	SER	1246	-4.087	-8.920	55.004	1.00	20.35
ATOM	8340	C	SER	1246	-1.617	-7.262	54.687	1.00	17.95
ATOM	8341	O	SER	1246	-0.865	-7.062	55.642	1.00	18.43
ATOM	8342	N	LEU	1247	-1.234	-7.943	53.606	1.00	17.78
ATOM	8343	CA	LEU	1247	0.131	-8.473	53.503	1.00	17.35
ATOM	8344	CB	LEU	1247	0.302	-9.318	52.225	1.00	16.63

ATOM	8345	CG	LEU	1247	0.200	-8.648	50.854	1.00	14.50
ATOM	8346	CD1	LEU	1247	1.513	-7.956	50.524	1.00	14.50
ATOM	8347	CD2	LEU	1247	-0.135	-9.688	49.777	1.00	14.80
ATOM	8348	C	LEU	1247	1.143	-7.323	53.521	1.00	15.79
ATOM	8349	O	LEU	1247	2.330	-7.520	53.796	1.00	14.98
ATOM	8350	N	GLY	1248	0.682	-6.116	53.212	1.00	13.56
ATOM	8351	CA	GLY	1248	1.584	-4.978	53.226	1.00	13.97
ATOM	8352	C	GLY	1248	2.119	-4.763	54.624	1.00	15.47
ATOM	8353	O	GLY	1248	3.228	-4.261	54.820	1.00	16.88
ATOM	8354	N	MET	1249	1.325	-5.162	55.608	1.00	14.33
ATOM	8355	CA	MET	1249	1.719	-5.005	56.996	1.00	16.01
ATOM	8356	CB	MET	1249	0.513	-4.502	57.800	1.00	19.46
ATOM	8357	CG	MET	1249	0.018	-3.144	57.322	1.00	21.69
ATOM	8358	SD	MET	1249	-1.516	-2.566	58.097	1.00	26.00
ATOM	8359	CE	MET	1249	-0.965	-2.281	59.756	1.00	27.35
ATOM	8360	C	MET	1249	2.290	-6.289	57.602	1.00	16.59
ATOM	8361	O	MET	1249	3.417	-6.305	58.096	1.00	14.81
ATOM	8362	N	THR	1250	1.525	-7.369	57.530	1.00	16.12
ATOM	8363	CA	THR	1250	1.946	-8.636	58.100	1.00	18.02
ATOM	8364	CB	THR	1250	0.751	-9.598	58.167	1.00	19.93
ATOM	8365	OG1	THR	1250	1.098	-10.759	58.930	1.00	25.56
ATOM	8366	CG2	THR	1250	0.341	-10.019	56.777	1.00	21.14
ATOM	8367	C	THR	1250	3.111	-9.311	57.368	1.00	16.42
ATOM	8368	O	THR	1250	3.920	-10.011	57.982	1.00	17.25
ATOM	8369	N	VAL	1251	3.207	-9.114	56.060	1.00	14.38
ATOM	8370	CA	VAL	1251	4.295	-9.729	55.306	1.00	14.53
ATOM	8371	CB	VAL	1251	3.792	-10.309	53.953	1.00	15.45
ATOM	8372	CG1	VAL	1251	4.975	-10.833	53.133	1.00	12.75
ATOM	8373	CG2	VAL	1251	2.796	-11.428	54.210	1.00	15.08
ATOM	8374	C	VAL	1251	5.419	-8.732	55.039	1.00	14.56
ATOM	8375	O	VAL	1251	6.573	-8.978	55.395	1.00	16.60
ATOM	8376	N	GLN	1252	5.077	-7.598	54.437	1.00	11.43
ATOM	8377	CA	GLN	1252	6.064	-6.574	54.097	1.00	13.81
ATOM	8378	CB	GLN	1252	5.493	-5.649	53.026	1.00	14.06
ATOM	8379	CG	GLN	1252	4.925	-6.404	51.832	1.00	15.86
ATOM	8380	CD	GLN	1252	4.458	-5.482	50.727	1.00	14.76
ATOM	8381	OE1	GLN	1252	4.178	-4.304	50.960	1.00	14.09
ATOM	8382	NE2	GLN	1252	4.358	-6.019	49.513	1.00	12.71
ATOM	8383	C	GLN	1252	6.581	-5.742	55.270	1.00	14.83
ATOM	8384	O	GLN	1252	7.726	-5.291	55.249	1.00	15.58
ATOM	8385	N	GLY	1253	5.739	-5.523	56.272	1.00	15.09
ATOM	8386	CA	GLY	1253	6.165	-4.760	57.434	1.00	15.66
ATOM	8387	C	GLY	1253	5.888	-3.269	57.397	1.00	17.26
ATOM	8388	O	GLY	1253	6.480	-2.501	58.163	1.00	18.18
ATOM	8389	N	HIS	1254	5.001	-2.838	56.509	1.00	17.51
ATOM	8390	CA	HIS	1254	4.671	-1.420	56.429	1.00	18.70
ATOM	8391	CB	HIS	1254	4.126	-1.065	55.045	1.00	19.45
ATOM	8392	CG	HIS	1254	5.119	-1.251	53.945	1.00	19.97
ATOM	8393	CD2	HIS	1254	5.122	-2.083	52.876	1.00	19.30
ATOM	8394	ND1	HIS	1254	6.287	-0.522	53.868	1.00	18.30
ATOM	8395	CE1	HIS	1254	6.965	-0.896	52.798	1.00	22.21
ATOM	8396	NE2	HIS	1254	6.280	-1.841	52.178	1.00	21.62
ATOM	8397	C	HIS	1254	3.634	-1.094	57.488	1.00	18.59
ATOM	8398	O	HIS	1254	2.986	-1.996	58.025	1.00	19.51
ATOM	8399	N	ASP	1255	3.487	0.192	57.788	1.00	19.71
ATOM	8400	CA	ASP	1255	2.530	0.651	58.795	1.00	23.34
ATOM	8401	CB	ASP	1255	2.943	2.030	59.331	1.00	27.63
ATOM	8402	CG	ASP	1255	3.048	3.077	58.239	1.00	29.81
ATOM	8403	OD1	ASP	1255	2.101	3.214	57.443	1.00	33.96
ATOM	8404	OD2	ASP	1255	4.082	3.776	58.178	1.00	37.20
ATOM	8405	C	ASP	1255	1.096	0.712	58.272	1.00	21.29
ATOM	8406	O	ASP	1255	0.156	0.883	59.047	1.00	21.48
ATOM	8407	N	SER	1256	0.931	0.587	56.958	1.00	19.07
ATOM	8408	CA	SER	1256	-0.398	0.609	56.339	1.00	16.19
ATOM	8409	CB	SER	1256	-0.761	2.024	55.869	1.00	14.13
ATOM	8410	OG	SER	1256	0.016	2.418	54.748	1.00	13.20
ATOM	8411	C	SER	1256	-0.394	-0.339	55.141	1.00	16.00
ATOM	8412	O	SER	1256	0.628	-0.956	54.838	1.00	16.64
ATOM	8413	N	THR	1257	-1.526	-0.444	54.453	1.00	15.54
ATOM	8414	CA	THR	1257	-1.616	-1.327	53.296	1.00	13.85
ATOM	8415	CB	THR	1257	-3.001	-2.009	53.214	1.00	14.68
ATOM	8416	OG1	THR	1257	-4.005	-1.020	52.942	1.00	13.16
ATOM	8417	CG2	THR	1257	-3.333	-2.708	54.518	1.00	14.28
ATOM	8418	C	THR	1257	-1.383	-0.596	51.978	1.00	14.73
ATOM	8419	O	THR	1257	-1.260	-1.232	50.931	1.00	14.37
ATOM	8420	N	LEU	1258	-1.296	0.731	52.028	1.00	11.56
ATOM	8421	CA	LEU	1258	-1.116	1.522	50.810	1.00	14.62

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ATOM    8422  CB  LEU  1258      -1.059   3.022  51.151  1.00 14.76
ATOM    8423  CG  LEU  1258      -2.415   3.708  51.387  1.00 18.81
ATOM    8424  CD1 LEU  1258      -3.037   3.193  52.689  1.00 18.31
ATOM    8425  CD2 LEU  1258      -2.225   5.211  51.451  1.00 17.89
ATOM    8426  C   LEU  1258       0.049   1.172  49.873  1.00 13.86
ATOM    8427  O   LEU  1258      -0.099   1.248  48.655  1.00 13.08
ATOM    8428  N   PRO  1259       1.215   0.790  50.419  1.00 15.27
ATOM    8429  CD  PRO  1259       1.610   0.817  51.836  1.00 16.92
ATOM    8430  CA  PRO  1259       2.355   0.448  49.562  1.00 13.94
ATOM    8431  CB  PRO  1259       3.521   0.372  50.544  1.00 17.82
ATOM    8432  CG  PRO  1259       2.850  -0.036  51.830  1.00 22.73
ATOM    8433  C   PRO  1259       2.208  -0.827  48.733  1.00 13.69
ATOM    8434  O   PRO  1259       2.956  -1.020  47.779  1.00 11.25
ATOM    8435  N   VAL  1260       1.254  -1.689  49.081  1.00 12.02
ATOM    8436  CA  VAL  1260       1.061  -2.932  48.330  1.00 12.65
ATOM    8437  CB  VAL  1260      -0.025  -3.825  48.981  1.00 12.45
ATOM    8438  CG1 VAL  1260      -0.258  -5.057  48.132  1.00 11.57
ATOM    8439  CG2 VAL  1260       0.401  -4.235  50.391  1.00  9.00
ATOM    8440  C   VAL  1260       0.659  -2.631  46.892  1.00 12.91
ATOM    8441  O   VAL  1260      -0.252  -1.834  46.638  1.00 12.38
ATOM    8442  N   THR  1261       1.325  -3.281  45.941  1.00 14.02
ATOM    8443  CA  THR  1261       1.019  -3.060  44.529  1.00 13.63
ATOM    8444  CB  THR  1261       2.326  -2.816  43.724  1.00 18.67
ATOM    8445  OG1 THR  1261       3.072  -1.749  44.337  1.00 18.95
ATOM    8446  CG2 THR  1261       2.010  -2.410  42.285  1.00 22.02
ATOM    8447  C   THR  1261       0.268  -4.259  43.930  1.00 12.64
ATOM    8448  O   THR  1261       0.115  -5.289  44.572  1.00 11.51
ATOM    8449  N   VAL  1262      -0.197  -4.108  42.697  1.00 10.72
ATOM    8450  CA  VAL  1262      -0.906  -5.181  42.017  1.00 11.46
ATOM    8451  CB  VAL  1262      -1.484  -4.682  40.675  1.00 10.61
ATOM    8452  CG1 VAL  1262      -2.069  -5.852  39.875  1.00 10.47
ATOM    8453  CG2 VAL  1262      -2.576  -3.631  40.956  1.00 10.70
ATOM    8454  C   VAL  1262       0.068  -6.339  41.790  1.00 11.29
ATOM    8455  O   VAL  1262      -0.310  -7.511  41.895  1.00 11.57
ATOM    8456  N   ALA  1263       1.324  -6.006  41.497  1.00 12.19
ATOM    8457  CA  ALA  1263       2.339  -7.031  41.275  1.00 11.44
ATOM    8458  CB  ALA  1263       3.673  -6.389  40.842  1.00 11.79
ATOM    8459  C   ALA  1263       2.531  -7.843  42.556  1.00 11.93
ATOM    8460  O   ALA  1263       2.724  -9.065  42.505  1.00 10.47
ATOM    8461  N   ASP  1264       2.491  -7.172  43.708  1.00  9.71
ATOM    8462  CA  ASP  1264       2.648  -7.883  44.981  1.00 13.19
ATOM    8463  CB  ASP  1264       2.646  -6.916  46.177  1.00 12.97
ATOM    8464  CG  ASP  1264       3.782  -5.904  46.135  1.00 15.35
ATOM    8465  OD1 ASP  1264       4.833  -6.206  45.548  1.00 13.99
ATOM    8466  OD2 ASP  1264       3.635  -4.805  46.713  1.00 12.70
ATOM    8467  C   ASP  1264       1.498  -8.873  45.157  1.00 11.29
ATOM    8468  O   ASP  1264       1.709 -10.036  45.488  1.00 12.23
ATOM    8469  N   ILE  1265       0.279  -8.406  44.920  1.00 10.36
ATOM    8470  CA  ILE  1265      -0.886  -9.263  45.053  1.00  9.25
ATOM    8471  CB  ILE  1265      -2.194  -8.492  44.733  1.00  8.35
ATOM    8472  CG2 ILE  1265      -3.381  -9.460  44.721  1.00 10.20
ATOM    8473  CG1 ILE  1265      -2.436  -7.394  45.763  1.00 10.86
ATOM    8474  CD1 ILE  1265      -2.621  -7.897  47.180  1.00 13.04
ATOM    8475  C   ILE  1265      -0.782 -10.474  44.125  1.00 10.11
ATOM    8476  O   ILE  1265      -1.066 -11.591  44.539  1.00 10.76
ATOM    8477  N   ALA  1266      -0.373 -10.259  42.878  1.00 11.37
ATOM    8478  CA  ALA  1266      -0.269 -11.361  41.915  1.00 10.83
ATOM    8479  CB  ALA  1266      -0.007 -10.804  40.512  1.00 10.92
ATOM    8480  C   ALA  1266       0.801 -12.398  42.299  1.00 10.56
ATOM    8481  O   ALA  1266       0.655 -13.606  42.048  1.00 10.01
ATOM    8482  N   TYR  1267       1.882 -11.919  42.905  1.00  9.93
ATOM    8483  CA  TYR  1267       2.978 -12.783  43.360  1.00  8.50
ATOM    8484  CB  TYR  1267       4.122 -11.912  43.911  1.00  9.28
ATOM    8485  CG  TYR  1267       5.236 -12.676  44.598  1.00  9.52
ATOM    8486  CD1 TYR  1267       6.098 -13.493  43.879  1.00 11.95
ATOM    8487  CE1 TYR  1267       7.142 -14.176  44.509  1.00 12.07
ATOM    8488  CD2 TYR  1267       5.436 -12.559  45.972  1.00 12.37
ATOM    8489  CE2 TYR  1267       6.475 -13.237  46.615  1.00 12.84
ATOM    8490  CZ  TYR  1267       7.321 -14.039  45.875  1.00 14.28
ATOM    8491  OH  TYR  1267       8.365 -14.691  46.510  1.00 13.09
ATOM    8492  C   TYR  1267       2.461 -13.732  44.441  1.00  9.24
ATOM    8493  O   TYR  1267       2.636 -14.960  44.368  1.00  7.23
ATOM    8494  N   HIS  1268       1.808 -13.162  45.448  1.00 10.07
ATOM    8495  CA  HIS  1268       1.277 -13.968  46.549  1.00 11.40
ATOM    8496  CB  HIS  1268       0.899 -13.042  47.717  1.00 10.91
ATOM    8497  CG  HIS  1268       2.093 -12.471  48.425  1.00 10.67
ATOM    8498  CD2 HIS  1268       2.720 -11.277  48.299  1.00 12.54
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ATOM	8499	ND1	HIS	1268	2.850	-13.207	49.310	1.00	9.83
ATOM	8500	CE1	HIS	1268	3.896	-12.495	49.694	1.00	12.36
ATOM	8501	NE2	HIS	1268	3.842	-11.321	49.095	1.00	11.55
ATOM	8502	C	HIS	1268	0.099	-14.836	46.096	1.00	12.08
ATOM	8503	O	HIS	1268	-0.104	-15.933	46.610	1.00	10.75
ATOM	8504	N	THR	1269	-0.655	-14.351	45.112	1.00	11.50
ATOM	8505	CA	THR	1269	-1.794	-15.094	44.591	1.00	11.48
ATOM	8506	CB	THR	1269	-2.590	-14.224	43.602	1.00	11.59
ATOM	8507	OG1	THR	1269	-3.215	-13.149	44.319	1.00	12.48
ATOM	8508	CG2	THR	1269	-3.651	-15.039	42.884	1.00	13.07
ATOM	8509	C	THR	1269	-1.340	-16.386	43.909	1.00	10.67
ATOM	8510	O	THR	1269	-1.928	-17.443	44.119	1.00	13.58
ATOM	8511	N	ALA	1270	-0.292	-16.301	43.098	1.00	8.94
ATOM	8512	CA	ALA	1270	0.228	-17.478	42.414	1.00	10.29
ATOM	8513	CB	ALA	1270	1.366	-17.076	41.465	1.00	11.72
ATOM	8514	C	ALA	1270	0.737	-18.492	43.437	1.00	10.90
ATOM	8515	O	ALA	1270	0.556	-19.701	43.269	1.00	12.02
ATOM	8516	N	ALA	1271	1.379	-17.998	44.495	1.00	11.07
ATOM	8517	CA	ALA	1271	1.924	-18.878	45.534	1.00	11.19
ATOM	8518	CB	ALA	1271	2.733	-18.064	46.541	1.00	10.42
ATOM	8519	C	ALA	1271	0.816	-19.642	46.251	1.00	11.93
ATOM	8520	O	ALA	1271	0.912	-20.849	46.458	1.00	9.16
ATOM	8521	N	VAL	1272	-0.228	-18.922	46.645	1.00	12.77
ATOM	8522	CA	VAL	1272	-1.356	-19.528	47.331	1.00	12.55
ATOM	8523	CB	VAL	1272	-2.339	-18.436	47.812	1.00	10.99
ATOM	8524	CG1	VAL	1272	-3.613	-19.062	48.365	1.00	13.11
ATOM	8525	CG2	VAL	1272	-1.660	-17.597	48.893	1.00	10.80
ATOM	8526	C	VAL	1272	-2.063	-20.535	46.436	1.00	12.93
ATOM	8527	O	VAL	1272	-2.442	-21.624	46.882	1.00	13.02
ATOM	8528	N	ARG	1273	-2.226	-20.191	45.163	1.00	12.86
ATOM	8529	CA	ARG	1273	-2.883	-21.109	44.236	1.00	13.02
ATOM	8530	CB	ARG	1273	-3.058	-20.457	42.862	1.00	13.85
ATOM	8531	CG	ARG	1273	-3.681	-21.381	41.817	1.00	15.25
ATOM	8532	CD	ARG	1273	-5.033	-21.909	42.266	1.00	15.44
ATOM	8533	NE	ARG	1273	-6.101	-20.917	42.171	1.00	15.46
ATOM	8534	CZ	ARG	1273	-7.292	-21.060	42.742	1.00	16.08
ATOM	8535	NH1	ARG	1273	-7.558	-22.151	43.454	1.00	14.02
ATOM	8536	NH2	ARG	1273	-8.218	-20.120	42.592	1.00	14.57
ATOM	8537	C	ARG	1273	-2.108	-22.410	44.088	1.00	14.78
ATOM	8538	O	ARG	1273	-2.710	-23.466	43.933	1.00	15.68
ATOM	8539	N	ARG	1274	-0.777	-22.337	44.123	1.00	13.54
ATOM	8540	CA	ARG	1274	0.030	-23.542	44.003	1.00	15.46
ATOM	8541	CB	ARG	1274	1.518	-23.195	43.949	1.00	14.07
ATOM	8542	CG	ARG	1274	1.922	-22.395	42.728	1.00	17.35
ATOM	8543	CD	ARG	1274	3.431	-22.383	42.532	1.00	16.78
ATOM	8544	NE	ARG	1274	3.792	-21.497	41.436	1.00	20.34
ATOM	8545	CZ	ARG	1274	4.066	-20.203	41.573	1.00	20.54
ATOM	8546	NH1	ARG	1274	4.038	-19.634	42.772	1.00	18.45
ATOM	8547	NH2	ARG	1274	4.341	-19.468	40.502	1.00	22.65
ATOM	8548	C	ARG	1274	-0.222	-24.468	45.185	1.00	16.23
ATOM	8549	O	ARG	1274	-0.225	-25.693	45.043	1.00	16.53
ATOM	8550	N	GLY	1275	-0.425	-23.872	46.353	1.00	15.34
ATOM	8551	CA	GLY	1275	-0.671	-24.654	47.554	1.00	16.35
ATOM	8552	C	GLY	1275	-2.105	-25.138	47.686	1.00	17.09
ATOM	8553	O	GLY	1275	-2.363	-26.148	48.338	1.00	17.88
ATOM	8554	N	ALA	1276	-3.042	-24.417	47.077	1.00	15.42
ATOM	8555	CA	ALA	1276	-4.457	-24.785	47.141	1.00	15.88
ATOM	8556	CB	ALA	1276	-5.158	-23.921	48.170	1.00	12.41
ATOM	8557	C	ALA	1276	-5.122	-24.623	45.770	1.00	18.03
ATOM	8558	O	ALA	1276	-5.898	-23.690	45.546	1.00	17.23
ATOM	8559	N	PRO	1277	-4.843	-25.550	44.841	1.00	19.05
ATOM	8560	CD	PRO	1277	-4.009	-26.751	45.029	1.00	21.91
ATOM	8561	CA	PRO	1277	-5.402	-25.507	43.486	1.00	20.89
ATOM	8562	CB	PRO	1277	-4.692	-26.665	42.784	1.00	21.37
ATOM	8563	CG	PRO	1277	-4.452	-27.631	43.890	1.00	23.97
ATOM	8564	C	PRO	1277	-6.922	-25.574	43.340	1.00	21.51
ATOM	8565	O	PRO	1277	-7.458	-25.173	42.306	1.00	21.21
ATOM	8566	N	ASN	1278	-7.615	-26.049	44.371	1.00	20.14
ATOM	8567	CA	ASN	1278	-9.065	-26.171	44.297	1.00	21.69
ATOM	8568	CB	ASN	1278	-9.483	-27.622	44.567	1.00	25.95
ATOM	8569	CG	ASN	1278	-8.833	-28.600	43.610	1.00	26.75
ATOM	8570	OD1	ASN	1278	-8.927	-28.446	42.393	1.00	30.57
ATOM	8571	ND2	ASN	1278	-8.173	-29.612	44.154	1.00	29.13
ATOM	8572	C	ASN	1278	-9.823	-25.245	45.235	1.00	21.44
ATOM	8573	O	ASN	1278	-11.042	-25.346	45.364	1.00	20.63
ATOM	8574	N	CYS	1279	-9.112	-24.332	45.884	1.00	19.87
ATOM	8575	CA	CYS	1279	-9.763	-23.408	46.804	1.00	19.78

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ATOM   8576  CB   CYS  1279      -8.749 -22.831  47.799  1.00 19.93
ATOM   8577  SG   CYS  1279      -7.738 -21.467  47.142  1.00 19.97
ATOM   8578  C    CYS  1279     -10.401 -22.245  46.055  1.00 19.66
ATOM   8579  O    CYS  1279     -10.106 -22.019  44.881  1.00 18.47
ATOM   8580  N    LEU  1280     -11.294 -21.530  46.738  1.00 18.36
ATOM   8581  CA   LEU  1280     -11.924 -20.336  46.179  1.00 17.84
ATOM   8582  CB   LEU  1280     -13.296 -20.059  46.814  1.00 19.49
ATOM   8583  CG   LEU  1280     -13.960 -18.734  46.406  1.00 18.08
ATOM   8584  CD1  LEU  1280     -14.186 -18.712  44.897  1.00 19.62
ATOM   8585  CD2  LEU  1280     -15.291 -18.559  47.142  1.00 17.89
ATOM   8586  C    LEU  1280     -10.937 -19.258  46.609  1.00 17.49
ATOM   8587  O    LEU  1280     -10.763 -19.003  47.805  1.00 16.91
ATOM   8588  N    LEU  1281     -10.285 -18.634  45.636  1.00 17.29
ATOM   8589  CA   LEU  1281      -9.274 -17.630  45.930  1.00 16.61
ATOM   8590  CB   LEU  1281      -7.998 -17.969  45.147  1.00 16.66
ATOM   8591  CG   LEU  1281      -6.651 -17.406  45.628  1.00 17.44
ATOM   8592  CD1  LEU  1281      -5.524 -18.159  44.929  1.00 15.28
ATOM   8593  CD2  LEU  1281      -6.566 -15.925  45.366  1.00 21.45
ATOM   8594  C    LEU  1281      -9.692 -16.195  45.633  1.00 17.29
ATOM   8595  O    LEU  1281      -9.900 -15.825  44.475  1.00 15.84
ATOM   8596  N    LEU  1282      -9.820 -15.398  46.689  1.00 16.41
ATOM   8597  CA   LEU  1282     -10.168 -13.983  46.561  1.00 17.05
ATOM   8598  CB   LEU  1282     -11.093 -13.534  47.699  1.00 16.06
ATOM   8599  CG   LEU  1282     -12.601 -13.795  47.550  1.00 17.50
ATOM   8600  CD1  LEU  1282     -12.847 -15.285  47.468  1.00 17.75
ATOM   8601  CD2  LEU  1282     -13.358 -13.176  48.732  1.00 18.80
ATOM   8602  C    LEU  1282      -8.876 -13.169  46.635  1.00 17.94
ATOM   8603  O    LEU  1282      -8.030 -13.425  47.487  1.00 22.05
ATOM   8604  N    ALA  1283      -8.712 -12.199  45.744  1.00 14.13
ATOM   8605  CA   ALA  1283      -7.519 -11.363  45.771  1.00 14.02
ATOM   8606  CB   ALA  1283      -6.694 -11.594  44.532  1.00 11.25
ATOM   8607  C    ALA  1283      -7.940  -9.903  45.855  1.00 12.74
ATOM   8608  O    ALA  1283      -8.862  -9.479  45.157  1.00 12.53
ATOM   8609  N    ASP  1284      -7.287  -9.131  46.719  1.00 13.81
ATOM   8610  CA   ASP  1284      -7.623  -7.718  46.827  1.00 14.31
ATOM   8611  CB   ASP  1284      -7.075  -7.095  48.113  1.00 17.63
ATOM   8612  CG   ASP  1284      -7.972  -7.298  49.310  1.00 19.26
ATOM   8613  OD1  ASP  1284      -9.202  -7.418  49.152  1.00 17.82
ATOM   8614  OD2  ASP  1284      -7.428  -7.301  50.430  1.00 23.10
ATOM   8615  C    ASP  1284      -7.003  -6.912  45.702  1.00 15.99
ATOM   8616  O    ASP  1284      -5.930  -7.256  45.202  1.00 14.33
ATOM   8617  N    LEU  1285      -7.688  -5.849  45.290  1.00 13.28
ATOM   8618  CA   LEU  1285      -7.104  -4.917  44.335  1.00 12.51
ATOM   8619  CB   LEU  1285      -8.151  -4.287  43.418  1.00 14.13
ATOM   8620  CG   LEU  1285      -8.543  -5.157  42.218  1.00 14.99
ATOM   8621  CD1  LEU  1285      -9.420  -4.365  41.262  1.00 15.19
ATOM   8622  CD2  LEU  1285      -7.273  -5.633  41.508  1.00 15.66
ATOM   8623  C    LEU  1285      -6.616  -3.907  45.373  1.00 13.60
ATOM   8624  O    LEU  1285      -7.386  -3.463  46.225  1.00 13.40
ATOM   8625  N    PRO  1286      -5.319  -3.569  45.349  1.00 13.01
ATOM   8626  CD   PRO  1286      -4.276  -4.134  44.477  1.00 12.67
ATOM   8627  CA   PRO  1286      -4.751  -2.621  46.312  1.00 13.67
ATOM   8628  CB   PRO  1286      -3.250  -2.909  46.223  1.00 14.83
ATOM   8629  CG   PRO  1286      -3.075  -3.237  44.758  1.00 13.00
ATOM   8630  C    PRO  1286      -5.079  -1.147  46.079  1.00 13.64
ATOM   8631  O    PRO  1286      -5.772  -0.781  45.128  1.00 14.01
ATOM   8632  N    PHE  1287      -4.583  -0.311  46.983  1.00 13.42
ATOM   8633  CA   PHE  1287      -4.779   1.130  46.929  1.00 13.53
ATOM   8634  CB   PHE  1287      -3.805   1.782  47.915  1.00 15.05
ATOM   8635  CG   PHE  1287      -3.661   3.265  47.750  1.00 15.65
ATOM   8636  CD1  PHE  1287      -4.740   4.120  47.989  1.00 16.81
ATOM   8637  CD2  PHE  1287      -2.435   3.814  47.372  1.00 13.49
ATOM   8638  CE1  PHE  1287      -4.593   5.490  47.865  1.00 16.89
ATOM   8639  CE2  PHE  1287      -2.281   5.184  47.247  1.00 14.29
ATOM   8640  CZ   PHE  1287      -3.367   6.032  47.492  1.00 17.50
ATOM   8641  C    PHE  1287      -4.587   1.692  45.515  1.00 14.14
ATOM   8642  O    PHE  1287      -3.581   1.418  44.851  1.00 11.80
ATOM   8643  N    MET  1288      -5.562   2.484  45.071  1.00 13.14
ATOM   8644  CA   MET  1288      -5.555   3.110  43.751  1.00 13.99
ATOM   8645  CB   MET  1288      -4.470   4.198  43.687  1.00 15.56
ATOM   8646  CG   MET  1288      -4.792   5.333  42.709  1.00 17.83
ATOM   8647  SD   MET  1288      -6.295   6.296  43.134  1.00 16.61
ATOM   8648  CE   MET  1288      -5.573   7.644  44.077  1.00 17.67
ATOM   8649  C    MET  1288      -5.377   2.140  42.569  1.00 14.20
ATOM   8650  O    MET  1288      -4.814   2.515  41.538  1.00 14.63
ATOM   8651  N    ALA  1289      -5.840   0.901  42.704  1.00 12.49
ATOM   8652  CA   ALA  1289      -5.723  -0.046  41.596  1.00 13.64
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ATOM	8653	CB	ALA	1289	-5.342	-1.438	42.112	1.00	12.98
ATOM	8654	C	ALA	1289	-7.039	-0.117	40.821	1.00	12.89
ATOM	8655	O	ALA	1289	-7.142	-0.819	39.816	1.00	13.36
ATOM	8656	N	TYR	1290	-8.045	0.623	41.276	1.00	11.64
ATOM	8657	CA	TYR	1290	-9.347	0.624	40.605	1.00	12.12
ATOM	8658	CB	TYR	1290	-10.284	-0.363	41.302	1.00	10.86
ATOM	8659	CG	TYR	1290	-10.276	-0.270	42.816	1.00	12.41
ATOM	8660	CD1	TYR	1290	-11.308	0.371	43.500	1.00	10.35
ATOM	8661	CE1	TYR	1290	-11.321	0.436	44.892	1.00	13.90
ATOM	8662	CD2	TYR	1290	-9.245	-0.844	43.563	1.00	12.59
ATOM	8663	CE2	TYR	1290	-9.242	-0.786	44.959	1.00	15.77
ATOM	8664	CZ	TYR	1290	-10.290	-0.144	45.616	1.00	16.49
ATOM	8665	OH	TYR	1290	-10.313	-0.095	46.992	1.00	16.97
ATOM	8666	C	TYR	1290	-9.946	2.029	40.593	1.00	11.80
ATOM	8667	O	TYR	1290	-11.142	2.212	40.811	1.00	12.18
ATOM	8668	N	ALA	1291	-9.095	3.009	40.310	1.00	11.23
ATOM	8669	CA	ALA	1291	-9.484	4.414	40.291	1.00	12.52
ATOM	8670	CB	ALA	1291	-8.233	5.291	40.232	1.00	13.30
ATOM	8671	C	ALA	1291	-10.425	4.748	39.141	1.00	13.87
ATOM	8672	O	ALA	1291	-11.127	5.755	39.183	1.00	15.07
ATOM	8673	N	THR	1292	-10.402	3.929	38.093	1.00	13.11
ATOM	8674	CA	THR	1292	-11.295	4.111	36.953	1.00	13.77
ATOM	8675	CB	THR	1292	-10.620	4.827	35.753	1.00	14.58
ATOM	8676	OG1	THR	1292	-9.685	3.944	35.123	1.00	13.37
ATOM	8677	CG2	THR	1292	-9.880	6.085	36.210	1.00	15.36
ATOM	8678	C	THR	1292	-11.676	2.699	36.526	1.00	13.97
ATOM	8679	O	THR	1292	-10.972	1.728	36.849	1.00	12.52
ATOM	8680	N	PRO	1293	-12.805	2.554	35.821	1.00	12.10
ATOM	8681	CD	PRO	1293	-13.854	3.557	35.555	1.00	11.83
ATOM	8682	CA	PRO	1293	-13.228	1.222	35.376	1.00	12.00
ATOM	8683	CB	PRO	1293	-14.503	1.517	34.593	1.00	11.85
ATOM	8684	CG	PRO	1293	-15.078	2.695	35.378	1.00	11.15
ATOM	8685	C	PRO	1293	-12.138	0.577	34.518	1.00	14.03
ATOM	8686	O	PRO	1293	-11.789	-0.588	34.712	1.00	15.96
ATOM	8687	N	GLU	1294	-11.592	1.351	33.585	1.00	14.44
ATOM	8688	CA	GLU	1294	-10.533	0.879	32.689	1.00	17.39
ATOM	8689	CB	GLU	1294	-10.024	2.047	31.836	1.00	20.55
ATOM	8690	CG	GLU	1294	-8.898	1.708	30.876	1.00	28.83
ATOM	8691	CD	GLU	1294	-8.043	2.922	30.527	1.00	32.90
ATOM	8692	OE1	GLU	1294	-7.124	3.253	31.311	1.00	36.01
ATOM	8693	OE2	GLU	1294	-8.301	3.553	29.479	1.00	37.17
ATOM	8694	C	GLU	1294	-9.366	0.279	33.471	1.00	16.65
ATOM	8695	O	GLU	1294	-8.904	-0.828	33.179	1.00	15.04
ATOM	8696	N	GLN	1295	-8.873	1.011	34.462	1.00	15.47
ATOM	8697	CA	GLN	1295	-7.760	0.500	35.257	1.00	15.54
ATOM	8698	CB	GLN	1295	-7.184	1.609	36.133	1.00	16.24
ATOM	8699	CG	GLN	1295	-6.427	2.633	35.322	1.00	23.28
ATOM	8700	CD	GLN	1295	-6.020	3.825	36.139	1.00	24.86
ATOM	8701	OE1	GLN	1295	-5.407	3.679	37.192	1.00	24.58
ATOM	8702	NE2	GLN	1295	-6.356	5.021	35.656	1.00	26.69
ATOM	8703	C	GLN	1295	-8.182	-0.682	36.106	1.00	13.96
ATOM	8704	O	GLN	1295	-7.394	-1.606	36.338	1.00	13.72
ATOM	8705	N	ALA	1296	-9.424	-0.654	36.576	1.00	13.84
ATOM	8706	CA	ALA	1296	-9.936	-1.755	37.377	1.00	13.08
ATOM	8707	CB	ALA	1296	-11.364	-1.452	37.848	1.00	14.56
ATOM	8708	C	ALA	1296	-9.925	-3.030	36.528	1.00	12.59
ATOM	8709	O	ALA	1296	-9.525	-4.083	37.010	1.00	13.75
ATOM	8710	N	PHE	1297	-10.345	-2.934	35.265	1.00	10.91
ATOM	8711	CA	PHE	1297	-10.363	-4.121	34.399	1.00	11.05
ATOM	8712	CB	PHE	1297	-10.886	-3.819	32.985	1.00	9.65
ATOM	8713	CG	PHE	1297	-12.206	-3.090	32.942	1.00	10.56
ATOM	8714	CD1	PHE	1297	-13.170	-3.279	33.929	1.00	10.04
ATOM	8715	CD2	PHE	1297	-12.475	-2.205	31.898	1.00	11.57
ATOM	8716	CE1	PHE	1297	-14.387	-2.593	33.891	1.00	10.32
ATOM	8717	CE2	PHE	1297	-13.684	-1.513	31.840	1.00	13.36
ATOM	8718	CZ	PHE	1297	-14.643	-1.706	32.841	1.00	12.32
ATOM	8719	C	PHE	1297	-8.956	-4.698	34.240	1.00	10.73
ATOM	8720	O	PHE	1297	-8.767	-5.908	34.318	1.00	10.33
ATOM	8721	N	GLU	1298	-7.981	-3.827	33.998	1.00	10.95
ATOM	8722	CA	GLU	1298	-6.607	-4.265	33.799	1.00	12.53
ATOM	8723	CB	GLU	1298	-5.736	-3.091	33.353	1.00	16.83
ATOM	8724	CG	GLU	1298	-4.361	-3.499	32.848	1.00	24.35
ATOM	8725	CD	GLU	1298	-4.377	-3.908	31.382	1.00	28.25
ATOM	8726	OE1	GLU	1298	-5.089	-4.875	31.025	1.00	30.56
ATOM	8727	OE2	GLU	1298	-3.681	-3.248	30.576	1.00	33.57
ATOM	8728	C	GLU	1298	-5.990	-4.913	35.036	1.00	11.29
ATOM	8729	O	GLU	1298	-5.396	-5.989	34.951	1.00	10.65

ATOM	8730	N	ASN	1299	-6.130	-4.274	36.190	1.00	10.85
ATOM	8731	CA	ASN	1299	-5.552	-4.838	37.414	1.00	11.72
ATOM	8732	CB	ASN	1299	-5.470	-3.769	38.511	1.00	11.28
ATOM	8733	CG	ASN	1299	-4.544	-2.621	38.121	1.00	14.85
ATOM	8734	OD1	ASN	1299	-3.460	-2.857	37.566	1.00	13.95
ATOM	8735	ND2	ASN	1299	-4.944	-1.389	38.413	1.00	13.47
ATOM	8736	C	ASN	1299	-6.301	-6.070	37.905	1.00	11.79
ATOM	8737	O	ASN	1299	-5.692	-6.983	38.473	1.00	11.65
ATOM	8738	N	ALA	1300	-7.619	-6.104	37.701	1.00	11.62
ATOM	8739	CA	ALA	1300	-8.384	-7.281	38.095	1.00	9.62
ATOM	8740	CB	ALA	1300	-9.864	-7.042	37.911	1.00	11.93
ATOM	8741	C	ALA	1300	-7.927	-8.436	37.209	1.00	9.30
ATOM	8742	O	ALA	1300	-7.725	-9.552	37.688	1.00	11.63
ATOM	8743	N	ALA	1301	-7.745	-8.176	35.918	1.00	9.27
ATOM	8744	CA	ALA	1301	-7.318	-9.247	35.033	1.00	10.11
ATOM	8745	CB	ALA	1301	-7.226	-8.749	33.591	1.00	8.32
ATOM	8746	C	ALA	1301	-5.981	-9.807	35.492	1.00	10.42
ATOM	8747	O	ALA	1301	-5.794	-11.029	35.523	1.00	10.44
ATOM	8748	N	THR	1302	-5.055	-8.926	35.873	1.00	10.18
ATOM	8749	CA	THR	1302	-3.729	-9.378	36.312	1.00	10.80
ATOM	8750	CB	THR	1302	-2.821	-8.189	36.740	1.00	11.76
ATOM	8751	OG1	THR	1302	-2.586	-7.327	35.612	1.00	12.59
ATOM	8752	CG2	THR	1302	-1.479	-8.702	37.260	1.00	11.04
ATOM	8753	C	THR	1302	-3.801	-10.378	37.457	1.00	10.37
ATOM	8754	O	THR	1302	-3.177	-11.439	37.391	1.00	10.85
ATOM	8755	N	VAL	1303	-4.563	-10.070	38.502	1.00	9.66
ATOM	8756	CA	VAL	1303	-4.622	-10.991	39.630	1.00	9.50
ATOM	8757	CB	VAL	1303	-5.112	-10.277	40.894	1.00	13.99
ATOM	8758	CG1	VAL	1303	-4.904	-11.178	42.085	1.00	18.44
ATOM	8759	CG2	VAL	1303	-4.326	-8.981	41.091	1.00	11.75
ATOM	8760	C	VAL	1303	-5.440	-12.253	39.358	1.00	10.29
ATOM	8761	O	VAL	1303	-5.187	-13.312	39.955	1.00	8.82
ATOM	8762	N	MET	1304	-6.412	-12.148	38.453	1.00	10.19
ATOM	8763	CA	MET	1304	-7.219	-13.307	38.069	1.00	12.39
ATOM	8764	CB	MET	1304	-8.431	-12.884	37.221	1.00	13.83
ATOM	8765	CG	MET	1304	-9.485	-12.065	37.951	1.00	18.90
ATOM	8766	SD	MET	1304	-10.483	-13.022	39.099	1.00	21.49
ATOM	8767	CE	MET	1304	-11.599	-13.972	37.916	1.00	17.14
ATOM	8768	C	MET	1304	-6.345	-14.277	37.254	1.00	11.47
ATOM	8769	O	MET	1304	-6.400	-15.495	37.462	1.00	11.55
ATOM	8770	N	ARG	1305	-5.549	-13.746	36.323	1.00	11.47
ATOM	8771	CA	ARG	1305	-4.674	-14.603	35.514	1.00	9.90
ATOM	8772	CB	ARG	1305	-3.925	-13.805	34.441	1.00	9.95
ATOM	8773	CG	ARG	1305	-4.805	-13.184	33.373	1.00	13.47
ATOM	8774	CD	ARG	1305	-4.001	-12.850	32.131	1.00	13.07
ATOM	8775	NE	ARG	1305	-4.782	-12.012	31.231	1.00	18.31
ATOM	8776	CZ	ARG	1305	-4.895	-10.694	31.343	1.00	17.19
ATOM	8777	NH1	ARG	1305	-4.261	-10.044	32.317	1.00	17.95
ATOM	8778	NH2	ARG	1305	-5.680	-10.033	30.500	1.00	16.90
ATOM	8779	C	ARG	1305	-3.643	-15.280	36.411	1.00	11.06
ATOM	8780	O	ARG	1305	-3.161	-16.370	36.103	1.00	10.28
ATOM	8781	N	ALA	1306	-3.314	-14.624	37.519	1.00	9.99
ATOM	8782	CA	ALA	1306	-2.342	-15.166	38.449	1.00	11.44
ATOM	8783	CB	ALA	1306	-1.767	-14.061	39.321	1.00	10.39
ATOM	8784	C	ALA	1306	-2.919	-16.278	39.319	1.00	12.44
ATOM	8785	O	ALA	1306	-2.172	-16.960	40.013	1.00	12.32
ATOM	8786	N	GLY	1307	-4.238	-16.455	39.297	1.00	12.27
ATOM	8787	CA	GLY	1307	-4.823	-17.529	40.075	1.00	13.76
ATOM	8788	C	GLY	1307	-6.098	-17.245	40.850	1.00	13.42
ATOM	8789	O	GLY	1307	-6.733	-18.176	41.345	1.00	14.10
ATOM	8790	N	ALA	1308	-6.481	-15.979	40.964	1.00	11.75
ATOM	8791	CA	ALA	1308	-7.690	-15.619	41.706	1.00	12.70
ATOM	8792	CB	ALA	1308	-7.653	-14.144	42.065	1.00	12.41
ATOM	8793	C	ALA	1308	-8.984	-15.939	40.958	1.00	12.62
ATOM	8794	O	ALA	1308	-9.007	-15.996	39.725	1.00	12.19
ATOM	8795	N	ASN	1309	-10.058	-16.165	41.715	1.00	12.53
ATOM	8796	CA	ASN	1309	-11.368	-16.466	41.138	1.00	13.45
ATOM	8797	CB	ASN	1309	-12.040	-17.641	41.852	1.00	14.86
ATOM	8798	CG	ASN	1309	-11.249	-18.914	41.769	1.00	15.09
ATOM	8799	OD1	ASN	1309	-10.999	-19.445	40.682	1.00	16.19
ATOM	8800	ND2	ASN	1309	-10.852	-19.426	42.926	1.00	12.00
ATOM	8801	C	ASN	1309	-12.288	-15.271	41.323	1.00	13.77
ATOM	8802	O	ASN	1309	-13.353	-15.207	40.719	1.00	14.80
ATOM	8803	N	MET	1310	-11.870	-14.332	42.165	1.00	13.61
ATOM	8804	CA	MET	1310	-12.687	-13.168	42.491	1.00	12.31
ATOM	8805	CB	MET	1310	-13.708	-13.584	43.562	1.00	14.22
ATOM	8806	CG	MET	1310	-14.634	-12.499	44.092	1.00	17.85

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ATOM   8807  SD   MET  1310    -15.747 -13.199  45.346  1.00 20.90
ATOM   8808  CE   MET  1310    -17.324 -13.078  44.544  1.00 22.97
ATOM   8809  C    MET  1310    -11.794 -12.051  43.016  1.00 12.24
ATOM   8810  O    MET  1310    -10.737 -12.304  43.589  1.00 11.09
ATOM   8811  N    VAL  1311    -12.227 -10.816  42.818  1.00 12.28
ATOM   8812  CA   VAL  1311    -11.466  -9.666  43.272  1.00 13.29
ATOM   8813  CB   VAL  1311    -11.215  -8.728  42.088  1.00 15.81
ATOM   8814  CG1  VAL  1311    -10.651  -7.421  42.566  1.00 19.74
ATOM   8815  CG2  VAL  1311    -10.253  -9.399  41.106  1.00 16.21
ATOM   8816  C    VAL  1311    -12.234  -8.923  44.360  1.00 13.00
ATOM   8817  O    VAL  1311    -13.462  -8.831  44.303  1.00 13.49
ATOM   8818  N    LYS  1312    -11.519  -8.409  45.355  1.00 12.33
ATOM   8819  CA   LYS  1312    -12.158  -7.642  46.413  1.00 11.16
ATOM   8820  CB   LYS  1312    -11.806  -8.197  47.797  1.00 13.10
ATOM   8821  CG   LYS  1312    -12.465  -7.402  48.925  1.00 15.32
ATOM   8822  CD   LYS  1312    -12.623  -8.211  50.207  1.00 16.26
ATOM   8823  CE   LYS  1312    -11.297  -8.393  50.927  1.00 18.97
ATOM   8824  NZ   LYS  1312    -10.732  -7.084  51.357  1.00 15.88
ATOM   8825  C    LYS  1312    -11.716  -6.188  46.315  1.00 13.64
ATOM   8826  O    LYS  1312    -10.526  -5.897  46.172  1.00 13.12
ATOM   8827  N    ILE  1313    -12.680  -5.274  46.381  1.00 12.62
ATOM   8828  CA   ILE  1313    -12.388  -3.842  46.308  1.00 14.45
ATOM   8829  CB   ILE  1313    -12.802  -3.250  44.949  1.00 16.94
ATOM   8830  CG2  ILE  1313    -11.890  -3.779  43.839  1.00 19.34
ATOM   8831  CG1  ILE  1313    -14.266  -3.588  44.661  1.00 18.39
ATOM   8832  CD1  ILE  1313    -14.764  -3.036  43.343  1.00 19.90
ATOM   8833  C    ILE  1313    -13.127  -3.086  47.413  1.00 14.85
ATOM   8834  O    ILE  1313    -14.264  -3.423  47.748  1.00 13.87
ATOM   8835  N    GLU  1314    -12.483  -2.054  47.951  1.00 15.54
ATOM   8836  CA   GLU  1314    -13.047  -1.259  49.043  1.00 14.90
ATOM   8837  CB   GLU  1314    -11.944  -0.825  50.019  1.00 16.10
ATOM   8838  CG   GLU  1314    -11.092  -1.946  50.573  1.00 17.92
ATOM   8839  CD   GLU  1314     -9.990  -1.445  51.512  1.00 18.81
ATOM   8840  OE1  GLU  1314     -9.869  -0.218  51.713  1.00 18.97
ATOM   8841  OE2  GLU  1314     -9.250  -2.287  52.056  1.00 20.27
ATOM   8842  C    GLU  1314    -13.783  -0.009  48.587  1.00 14.25
ATOM   8843  O    GLU  1314    -13.290   0.737  47.746  1.00 16.21
ATOM   8844  N    GLY  1315    -14.963   0.229  49.151  1.00 16.28
ATOM   8845  CA   GLY  1315    -15.705   1.416  48.781  1.00 16.32
ATOM   8846  C    GLY  1315    -17.196   1.197  48.692  1.00 16.99
ATOM   8847  O    GLY  1315    -17.662   0.060  48.630  1.00 16.14
ATOM   8848  N    GLY  1316    -17.942   2.295  48.669  1.00 16.84
ATOM   8849  CA   GLY  1316    -19.390   2.207  48.600  1.00 18.58
ATOM   8850  C    GLY  1316    -19.974  -2.452  47.224  1.00 19.09
ATOM   8851  O    GLY  1316    -19.491   1.928  46.222  1.00 18.98
ATOM   8852  N    GLU  1317    -21.022   3.268  47.196  1.00 19.78
ATOM   8853  CA   GLU  1317    -21.753   3.608  45.983  1.00 21.03
ATOM   8854  CB   GLU  1317    -22.791   4.686  46.302  1.00 24.13
ATOM   8855  CG   GLU  1317    -24.226   4.206  46.235  1.00 34.04
ATOM   8856  CD   GLU  1317    -24.910   4.591  44.946  1.00 35.84
ATOM   8857  OE1  GLU  1317    -24.373   4.264  43.863  1.00 40.02
ATOM   8858  OE2  GLU  1317    -25.986   5.219  45.018  1.00 38.96
ATOM   8859  C    GLU  1317    -20.948   4.052  44.768  1.00 19.20
ATOM   8860  O    GLU  1317    -21.318   3.733  43.640  1.00 17.96
ATOM   8861  N    TRP  1318    -19.857   4.783  44.981  1.00 17.44
ATOM   8862  CA   TRP  1318    -19.079   5.258  43.846  1.00 17.52
ATOM   8863  CB   TRP  1318    -17.909   6.149  44.301  1.00 18.44
ATOM   8864  CG   TRP  1318    -16.754   5.430  44.951  1.00 17.60
ATOM   8865  CD2  TRP  1318    -15.534   5.018  44.316  1.00 17.10
ATOM   8866  CE2  TRP  1318    -14.730   4.408  45.307  1.00 16.85
ATOM   8867  CE3  TRP  1318    -15.043   5.106  43.005  1.00 15.81
ATOM   8868  CD1  TRP  1318    -16.645   5.060  46.262  1.00 18.81
ATOM   8869  NE1  TRP  1318    -15.431   4.448  46.483  1.00 17.06
ATOM   8870  CZ2  TRP  1318    -13.458   3.888  45.030  1.00 16.56
ATOM   8871  CZ3  TRP  1318    -13.774   4.588  42.727  1.00 16.65
ATOM   8872  CH2  TRP  1318    -13.000   3.987  43.736  1.00 13.94
ATOM   8873  C    TRP  1318    -18.557   4.121  42.972  1.00 15.10
ATOM   8874  O    TRP  1318    -18.168   4.346  41.830  1.00 17.22
ATOM   8875  N    LEU  1319    -18.580   2.903  43.507  1.00 15.72
ATOM   8876  CA   LEU  1319    -18.100   1.712  42.804  1.00 14.82
ATOM   8877  CB   LEU  1319    -17.556   0.698  43.813  1.00 15.07
ATOM   8878  CG   LEU  1319    -16.228   1.040  44.490  1.00 15.24
ATOM   8879  CD1  LEU  1319    -15.872  -0.036  45.504  1.00 14.37
ATOM   8880  CD2  LEU  1319    -15.139   1.148  43.429  1.00 14.65
ATOM   8881  C    LEU  1319    -19.129   0.992  41.938  1.00 15.55
ATOM   8882  O    LEU  1319    -18.779   0.080  41.192  1.00 16.40
ATOM   8883  N    VAL  1320    -20.393   1.385  42.028  1.00 15.54
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ATOM	8884	CA	VAL	1320	-21.446	0.700	41.274	1.00	15.61
ATOM	8885	CB	VAL	1320	-22.769	1.480	41.328	1.00	15.50
ATOM	8886	CG1	VAL	1320	-23.760	0.896	40.322	1.00	16.93
ATOM	8887	CG2	VAL	1320	-23.339	1.407	42.722	1.00	15.37
ATOM	8888	C	VAL	1320	-21.114	0.401	39.819	1.00	15.88
ATOM	8889	O	VAL	1320	-21.237	-0.740	39.375	1.00	16.33
ATOM	8890	N	GLU	1321	-20.703	1.427	39.078	1.00	15.89
ATOM	8891	CA	GLU	1321	-20.367	1.256	37.667	1.00	16.86
ATOM	8892	CB	GLU	1321	-19.982	2.601	37.038	1.00	18.42
ATOM	8893	CG	GLU	1321	-19.483	2.486	35.604	1.00	23.16
ATOM	8894	CD	GLU	1321	-19.156	3.836	34.967	1.00	27.92
ATOM	8895	OE1	GLU	1321	-18.295	4.576	35.495	1.00	28.97
ATOM	8896	OE2	GLU	1321	-19.761	4.153	33.923	1.00	30.95
ATOM	8897	C	GLU	1321	-19.212	0.265	37.509	1.00	16.05
ATOM	8898	O	GLU	1321	-19.258	-0.639	36.671	1.00	13.68
ATOM	8899	N	THR	1322	-18.180	0.441	38.325	1.00	13.47
ATOM	8900	CA	THR	1322	-17.013	-0.432	38.271	1.00	14.01
ATOM	8901	CB	THR	1322	-15.983	-0.025	39.352	1.00	14.03
ATOM	8902	OG1	THR	1322	-15.481	1.280	39.046	1.00	16.65
ATOM	8903	CG2	THR	1322	-14.807	-1.001	39.395	1.00	13.60
ATOM	8904	C	THR	1322	-17.432	-1.887	38.462	1.00	11.93
ATOM	8905	O	THR	1322	-17.064	-2.768	37.675	1.00	13.98
ATOM	8906	N	VAL	1323	-18.221	-2.133	39.501	1.00	12.13
ATOM	8907	CA	VAL	1323	-18.696	-3.483	39.794	1.00	12.28
ATOM	8908	CB	VAL	1323	-19.511	-3.508	41.107	1.00	14.17
ATOM	8909	CG1	VAL	1323	-20.152	-4.881	41.303	1.00	14.33
ATOM	8910	CG2	VAL	1323	-18.597	-3.177	42.275	1.00	12.26
ATOM	8911	C	VAL	1323	-19.537	-4.061	38.647	1.00	13.33
ATOM	8912	O	VAL	1323	-19.326	-5.203	38.226	1.00	13.70
ATOM	8913	N	GLN	1324	-20.480	-3.274	38.137	1.00	13.37
ATOM	8914	CA	GLN	1324	-21.322	-3.740	37.039	1.00	15.20
ATOM	8915	CB	GLN	1324	-22.300	-2.640	36.599	1.00	16.72
ATOM	8916	CG	GLN	1324	-23.292	-2.224	37.682	1.00	22.21
ATOM	8917	CD	GLN	1324	-24.211	-1.098	37.244	1.00	24.87
ATOM	8918	OE1	GLN	1324	-23.764	-0.121	36.646	1.00	26.46
ATOM	8919	NE2	GLN	1324	-25.498	-1.222	37.552	1.00	27.32
ATOM	8920	C	GLN	1324	-20.460	-4.149	35.850	1.00	15.72
ATOM	8921	O	GLN	1324	-20.617	-5.237	35.304	1.00	14.44
ATOM	8922	N	MET	1325	-19.536	-3.273	35.469	1.00	14.94
ATOM	8923	CA	MET	1325	-18.670	-3.533	34.334	1.00	14.16
ATOM	8924	CB	MET	1325	-17.942	-2.251	33.932	1.00	13.53
ATOM	8925	CG	MET	1325	-18.877	-1.166	33.384	1.00	18.17
ATOM	8926	SD	MET	1325	-17.961	0.297	32.829	1.00	18.88
ATOM	8927	CE	MET	1325	-17.729	-0.079	31.088	1.00	21.14
ATOM	8928	C	MET	1325	-17.688	-4.684	34.558	1.00	13.07
ATOM	8929	O	MET	1325	-17.438	-5.465	33.639	1.00	12.98
ATOM	8930	N	LEU	1326	-17.127	-4.809	35.757	1.00	12.81
ATOM	8931	CA	LEU	1326	-16.213	-5.919	36.009	1.00	13.89
ATOM	8932	CB	LEU	1326	-15.616	-5.835	37.417	1.00	13.67
ATOM	8933	CG	LEU	1326	-14.431	-4.878	37.574	1.00	14.23
ATOM	8934	CD1	LEU	1326	-14.102	-4.695	39.044	1.00	13.52
ATOM	8935	CD2	LEU	1326	-13.228	-5.438	36.815	1.00	13.49
ATOM	8936	C	LEU	1326	-16.965	-7.235	35.864	1.00	15.09
ATOM	8937	O	LEU	1326	-16.477	-8.177	35.229	1.00	17.34
ATOM	8938	N	THR	1327	-18.159	-7.292	36.453	1.00	15.39
ATOM	8939	CA	THR	1327	-18.993	-8.495	36.420	1.00	17.21
ATOM	8940	CB	THR	1327	-20.327	-8.284	37.203	1.00	19.12
ATOM	8941	OG1	THR	1327	-20.041	-8.025	38.585	1.00	22.00
ATOM	8942	CG2	THR	1327	-21.203	-9.530	37.120	1.00	21.12
ATOM	8943	C	THR	1327	-19.331	-8.944	34.999	1.00	17.87
ATOM	8944	O	THR	1327	-19.200	-10.123	34.673	1.00	15.79
ATOM	8945	N	GLU	1328	-19.763	-8.018	34.146	1.00	19.35
ATOM	8946	CA	GLU	1328	-20.110	-8.417	32.787	1.00	19.92
ATOM	8947	CB	GLU	1328	-20.951	-7.330	32.104	1.00	24.09
ATOM	8948	CG	GLU	1328	-20.189	-6.213	31.461	1.00	25.04
ATOM	8949	CD	GLU	1328	-21.115	-5.173	30.854	1.00	23.39
ATOM	8950	OE1	GLU	1328	-22.172	-5.550	30.306	1.00	27.43
ATOM	8951	OE2	GLU	1328	-20.782	-3.977	30.916	1.00	21.37
ATOM	8952	C	GLU	1328	-18.861	-8.769	31.971	1.00	20.62
ATOM	8953	O	GLU	1328	-18.953	-9.345	30.882	1.00	22.88
ATOM	8954	N	ARG	1329	-17.692	-8.443	32.516	1.00	18.60
ATOM	8955	CA	ARG	1329	-16.425	-8.760	31.870	1.00	16.07
ATOM	8956	CB	ARG	1329	-15.499	-7.539	31.903	1.00	15.66
ATOM	8957	CG	ARG	1329	-15.916	-6.473	30.899	1.00	12.22
ATOM	8958	CD	ARG	1329	-15.278	-5.098	31.121	1.00	15.51
ATOM	8959	NE	ARG	1329	-15.805	-4.147	30.144	1.00	11.85
ATOM	8960	CZ	ARG	1329	-17.075	-3.748	30.096	1.00	13.40

ATOM	8961	NH1	ARG	1329	-17.947	-4.206	30.980	1.00	13.96
ATOM	8962	NH2	ARG	1329	-17.486	-2.922	29.142	1.00	11.23
ATOM	8963	C	ARG	1329	-15.737	-9.986	32.496	1.00	16.04
ATOM	8964	O	ARG	1329	-14.508	-10.111	32.466	1.00	15.96
ATOM	8965	N	ALA	1330	-16.541	-10.872	33.078	1.00	15.89
ATOM	8966	CA	ALA	1330	-16.060	-12.129	33.678	1.00	14.56
ATOM	8967	CB	ALA	1330	-15.213	-12.897	32.650	1.00	14.48
ATOM	8968	C	ALA	1330	-15.306	-12.070	35.004	1.00	14.53
ATOM	8969	O	ALA	1330	-14.685	-13.053	35.409	1.00	14.82
ATOM	8970	N	VAL	1331	-15.359	-10.929	35.679	1.00	13.56
ATOM	8971	CA	VAL	1331	-14.678	-10.779	36.951	1.00	14.03
ATOM	8972	CB	VAL	1331	-13.755	-9.536	36.926	1.00	14.54
ATOM	8973	CG1	VAL	1331	-13.126	-9.306	38.300	1.00	15.64
ATOM	8974	CG2	VAL	1331	-12.653	-9.736	35.888	1.00	17.69
ATOM	8975	C	VAL	1331	-15.667	-10.663	38.117	1.00	13.93
ATOM	8976	O	VAL	1331	-16.349	-9.660	38.260	1.00	15.56
ATOM	8977	N	PRO	1332	-15.779	-11.716	38.946	1.00	14.57
ATOM	8978	CD	PRO	1332	-15.253	-13.080	38.790	1.00	12.80
ATOM	8979	CA	PRO	1332	-16.706	-11.638	40.079	1.00	14.22
ATOM	8980	CB	PRO	1332	-16.793	-13.077	40.572	1.00	15.61
ATOM	8981	CG	PRO	1332	-15.500	-13.663	40.155	1.00	20.45
ATOM	8982	C	PRO	1332	-16.111	-10.694	41.100	1.00	13.84
ATOM	8983	O	PRO	1332	-14.888	-10.616	41.268	1.00	11.75
ATOM	8984	N	VAL	1333	-16.976	-9.966	41.784	1.00	12.32
ATOM	8985	CA	VAL	1333	-16.502	-8.991	42.752	1.00	11.45
ATOM	8986	CB	VAL	1333	-16.886	-7.561	42.311	1.00	10.56
ATOM	8987	CG1	VAL	1333	-16.465	-6.551	43.378	1.00	12.68
ATOM	8988	CG2	VAL	1333	-16.228	-7.235	40.987	1.00	9.00
ATOM	8989	C	VAL	1333	-17.022	-9.206	44.150	1.00	13.49
ATOM	8990	O	VAL	1333	-18.176	-9.581	44.346	1.00	13.53
ATOM	8991	N	CYS	1334	-16.145	-8.987	45.122	1.00	12.49
ATOM	8992	CA	CYS	1334	-16.515	-9.072	46.524	1.00	13.08
ATOM	8993	CB	CYS	1334	-15.561	-9.988	47.294	1.00	14.71
ATOM	8994	SG	CYS	1334	-15.827	-9.940	49.091	1.00	15.45
ATOM	8995	C	CYS	1334	-16.359	-7.637	47.015	1.00	13.95
ATOM	8996	O	CYS	1334	-15.312	-7.011	46.818	1.00	14.76
ATOM	8997	N	GLY	1335	-17.413	-7.114	47.627	1.00	14.01
ATOM	8998	CA	GLY	1335	-17.373	-5.764	48.141	1.00	13.56
ATOM	8999	C	GLY	1335	-16.726	-5.747	49.510	1.00	13.93
ATOM	9000	O	GLY	1335	-16.501	-6.802	50.105	1.00	14.54
ATOM	9001	N	HIS	1336	-16.445	-4.551	50.017	1.00	14.71
ATOM	9002	CA	HIS	1336	-15.801	-4.397	51.320	1.00	14.53
ATOM	9003	CB	HIS	1336	-14.277	-4.469	51.143	1.00	13.80
ATOM	9004	CG	HIS	1336	-13.511	-4.501	52.431	1.00	16.43
ATOM	9005	CD2	HIS	1336	-13.866	-4.166	53.697	1.00	14.92
ATOM	9006	ND1	HIS	1336	-12.199	-4.917	52.502	1.00	16.33
ATOM	9007	CE1	HIS	1336	-11.778	-4.839	53.752	1.00	17.68
ATOM	9008	NE2	HIS	1336	-12.769	-4.386	54.498	1.00	15.76
ATOM	9009	C	HIS	1336	-16.206	-3.043	51.905	1.00	14.17
ATOM	9010	O	HIS	1336	-15.852	-2.005	51.363	1.00	13.31
ATOM	9011	N	LEU	1337	-16.947	-3.069	53.010	1.00	16.38
ATOM	9012	CA	LEU	1337	-17.417	-1.855	53.662	1.00	14.42
ATOM	9013	CB	LEU	1337	-18.937	-1.727	53.509	1.00	14.97
ATOM	9014	CG	LEU	1337	-19.500	-1.425	52.118	1.00	13.18
ATOM	9015	CD1	LEU	1337	-21.022	-1.498	52.174	1.00	16.54
ATOM	9016	CD2	LEU	1337	-19.039	-0.057	51.659	1.00	15.16
ATOM	9017	C	LEU	1337	-17.074	-1.819	55.152	1.00	15.08
ATOM	9018	O	LEU	1337	-16.704	-2.835	55.735	1.00	15.49
ATOM	9019	N	GLY	1338	-17.234	-0.646	55.763	1.00	16.52
ATOM	9020	CA	GLY	1338	-16.931	-0.487	57.175	1.00	18.65
ATOM	9021	C	GLY	1338	-15.546	0.103	57.329	1.00	20.37
ATOM	9022	O	GLY	1338	-15.244	1.169	56.779	1.00	20.72
ATOM	9023	N	LEU	1339	-14.692	-0.592	58.071	1.00	21.08
ATOM	9024	CA	LEU	1339	-13.328	-0.130	58.274	1.00	21.80
ATOM	9025	CB	LEU	1339	-12.760	-0.690	59.586	1.00	22.96
ATOM	9026	CG	LEU	1339	-11.636	0.099	60.273	1.00	26.11
ATOM	9027	CD1	LEU	1339	-11.099	-0.714	61.435	1.00	25.23
ATOM	9028	CD2	LEU	1339	-10.528	0.410	59.290	1.00	25.89
ATOM	9029	C	LEU	1339	-12.500	-0.633	57.096	1.00	21.63
ATOM	9030	O	LEU	1339	-12.007	-1.762	57.108	1.00	21.30
ATOM	9031	N	THR	1340	-12.386	0.205	56.070	1.00	21.68
ATOM	9032	CA	THR	1340	-11.618	-0.104	54.864	1.00	22.62
ATOM	9033	CB	THR	1340	-12.301	0.507	53.626	1.00	23.97
ATOM	9034	OG1	THR	1340	-12.526	1.906	53.842	1.00	23.53
ATOM	9035	CG2	THR	1340	-13.641	-0.169	53.375	1.00	26.26
ATOM	9036	C	THR	1340	-10.232	0.510	55.053	1.00	20.26
ATOM	9037	O	THR	1340	-10.057	1.715	54.899	1.00	23.50

ATOM	9038	N	PRO	1341	-9.226	-0.323	55.372	1.00	20.57
ATOM	9039	CD	PRO	1341	-9.300	-1.794	55.327	1.00	21.40
ATOM	9040	CA	PRO	1341	-7.842	0.114	55.603	1.00	19.00
ATOM	9041	CB	PRO	1341	-7.091	-1.205	55.802	1.00	22.07
ATOM	9042	CG	PRO	1341	-7.881	-2.171	54.978	1.00	25.73
ATOM	9043	C	PRO	1341	-7.180	1.019	54.570	1.00	18.31
ATOM	9044	O	PRO	1341	-6.332	1.832	54.928	1.00	16.70
ATOM	9045	N	GLN	1342	-7.551	0.895	53.299	1.00	15.90
ATOM	9046	CA	GLN	1342	-6.944	1.751	52.284	1.00	18.99
ATOM	9047	CB	GLN	1342	-7.432	1.355	50.882	1.00	16.29
ATOM	9048	CG	GLN	1342	-6.722	0.124	50.316	1.00	17.70
ATOM	9049	CD	GLN	1342	-7.365	-0.407	49.047	1.00	18.63
ATOM	9050	OE1	GLN	1342	-7.891	0.360	48.236	1.00	21.48
ATOM	9051	NE2	GLN	1342	-7.310	-1.725	48.858	1.00	20.30
ATOM	9052	C	GLN	1342	-7.225	3.235	52.559	1.00	18.46
ATOM	9053	O	GLN	1342	-6.435	4.104	52.189	1.00	20.27
ATOM	9054	N	SER	1343	-8.347	3.528	53.207	1.00	20.86
ATOM	9055	CA	SER	1343	-8.684	4.913	53.528	1.00	21.17
ATOM	9056	CB	SER	1343	-10.190	5.154	53.330	1.00	22.94
ATOM	9057	OG	SER	1343	-10.574	4.937	51.979	1.00	24.54
ATOM	9058	C	SER	1343	-8.288	5.261	54.972	1.00	21.41
ATOM	9059	O	SER	1343	-8.924	6.099	55.620	1.00	20.45
ATOM	9060	N	VAL	1344	-7.232	4.632	55.480	1.00	20.55
ATOM	9061	CA	VAL	1344	-6.802	4.911	56.849	1.00	21.71
ATOM	9062	CB	VAL	1344	-5.552	4.060	57.252	1.00	23.85
ATOM	9063	CG1	VAL	1344	-4.370	4.379	56.351	1.00	21.50
ATOM	9064	CG2	VAL	1344	-5.201	4.321	58.712	1.00	22.91
ATOM	9065	C	VAL	1344	-6.501	6.398	57.057	1.00	22.37
ATOM	9066	O	VAL	1344	-6.803	6.960	58.114	1.00	22.26
ATOM	9067	N	ASN	1345	-5.929	7.038	56.041	1.00	22.04
ATOM	9068	CA	ASN	1345	-5.596	8.458	56.123	1.00	22.35
ATOM	9069	CB	ASN	1345	-4.665	8.845	54.974	1.00	22.83
ATOM	9070	CG	ASN	1345	-3.349	8.103	55.030	1.00	22.33
ATOM	9071	OD1	ASN	1345	-2.566	8.288	55.958	1.00	23.07
ATOM	9072	ND2	ASN	1345	-3.103	7.248	54.045	1.00	22.68
ATOM	9073	C	ASN	1345	-6.840	9.336	56.103	1.00	24.24
ATOM	9074	O	ASN	1345	-6.816	10.465	56.588	1.00	23.31
ATOM	9075	N	ILE	1346	-7.923	8.817	55.534	1.00	24.67
ATOM	9076	CA	ILE	1346	-9.179	9.561	55.477	1.00	26.60
ATOM	9077	CB	ILE	1346	-10.155	8.949	54.447	1.00	25.22
ATOM	9078	CG2	ILE	1346	-11.529	9.593	54.580	1.00	25.45
ATOM	9079	CG1	ILE	1346	-9.604	9.121	53.031	1.00	26.82
ATOM	9080	CD1	ILE	1346	-9.646	10.548	52.518	1.00	27.54
ATOM	9081	C	ILE	1346	-9.847	9.534	56.850	1.00	25.86
ATOM	9082	O	ILE	1346	-10.311	10.565	57.337	1.00	27.66
ATOM	9083	N	PHE	1347	-9.896	8.352	57.463	1.00	26.34
ATOM	9084	CA	PHE	1347	-10.513	8.180	58.780	1.00	27.79
ATOM	9085	CB	PHE	1347	-10.855	6.707	59.040	1.00	30.55
ATOM	9086	CG	PHE	1347	-11.662	6.055	57.951	1.00	33.41
ATOM	9087	CD1	PHE	1347	-12.751	6.707	57.382	1.00	33.70
ATOM	9088	CD2	PHE	1347	-11.349	4.766	57.518	1.00	34.68
ATOM	9089	CE1	PHE	1347	-13.516	6.088	56.398	1.00	34.26
ATOM	9090	CE2	PHE	1347	-12.108	4.137	56.533	1.00	34.13
ATOM	9091	CZ	PHE	1347	-13.193	4.799	55.973	1.00	35.64
ATOM	9092	C	PHE	1347	-9.609	8.655	59.912	1.00	28.04
ATOM	9093	O	PHE	1347	-10.062	8.822	61.044	1.00	25.56
ATOM	9094	N	GLY	1348	-8.329	8.852	59.609	1.00	28.73
ATOM	9095	CA	GLY	1348	-7.387	9.290	60.625	1.00	30.19
ATOM	9096	C	GLY	1348	-6.961	8.147	61.531	1.00	31.20
ATOM	9097	O	GLY	1348	-6.574	8.361	62.679	1.00	32.36
ATOM	9098	N	GLY	1349	-7.039	6.923	61.019	1.00	32.22
ATOM	9099	CA	GLY	1349	-6.651	5.770	61.812	1.00	33.19
ATOM	9100	C	GLY	1349	-7.580	4.592	61.597	1.00	34.56
ATOM	9101	O	GLY	1349	-8.482	4.649	60.762	1.00	32.55
ATOM	9102	N	TYR	1350	-7.359	3.517	62.346	1.00	35.88
ATOM	9103	CA	TYR	1350	-8.195	2.333	62.226	1.00	36.67
ATOM	9104	CB	TYR	1350	-7.336	1.069	62.293	1.00	36.59
ATOM	9105	CG	TYR	1350	-6.220	1.046	61.271	1.00	38.85
ATOM	9106	CD1	TYR	1350	-4.989	1.643	61.542	1.00	38.83
ATOM	9107	CE1	TYR	1350	-3.969	1.661	60.592	1.00	38.99
ATOM	9108	CD2	TYR	1350	-6.406	0.463	60.017	1.00	38.83
ATOM	9109	CE2	TYR	1350	-5.389	0.478	59.054	1.00	38.92
ATOM	9110	CZ	TYR	1350	-4.177	1.079	59.350	1.00	38.88
ATOM	9111	OH	TYR	1350	-3.174	1.117	58.407	1.00	38.09
ATOM	9112	C	TYR	1350	-9.239	2.327	63.336	1.00	37.58
ATOM	9113	O	TYR	1350	-9.110	1.612	64.330	1.00	38.34
ATOM	9114	N	LYS	1351	-10.278	3.132	63.150	1.00	37.80

ATOM	9115	CA	LYS	1351	-11.349	3.254	64.128	1.00	37.85
ATOM	9116	CB	LYS	1351	-11.650	4.738	64.354	1.00	39.96
ATOM	9117	CG	LYS	1351	-10.399	5.592	64.529	1.00	41.93
ATOM	9118	CD	LYS	1351	-10.671	7.063	64.253	1.00	43.31
ATOM	9119	CE	LYS	1351	-9.373	7.860	64.209	1.00	44.78
ATOM	9120	NZ	LYS	1351	-9.596	9.288	63.846	1.00	44.41
ATOM	9121	C	LYS	1351	-12.612	2.531	63.648	1.00	37.02
ATOM	9122	O	LYS	1351	-12.809	2.329	62.449	1.00	35.65
ATOM	9123	N	VAL	1352	-13.461	2.145	64.595	1.00	36.10
ATOM	9124	CA	VAL	1352	-14.705	1.456	64.280	1.00	35.05
ATOM	9125	CB	VAL	1352	-15.483	1.100	65.569	1.00	35.70
ATOM	9126	CG1	VAL	1352	-16.731	0.303	65.232	1.00	34.09
ATOM	9127	CG2	VAL	1352	-14.586	0.314	66.512	1.00	35.71
ATOM	9128	C	VAL	1352	-15.570	2.358	63.405	1.00	34.29
ATOM	9129	O	VAL	1352	-15.604	3.576	63.595	1.00	32.86
ATOM	9130	N	GLN	1353	-16.259	1.755	62.441	1.00	33.15
ATOM	9131	CA	GLN	1353	-17.121	2.493	61.523	1.00	33.61
ATOM	9132	CB	GLN	1353	-16.664	2.248	60.082	1.00	35.20
ATOM	9133	CG	GLN	1353	-16.394	3.503	59.269	1.00	37.01
ATOM	9134	CD	GLN	1353	-15.374	4.407	59.920	1.00	37.73
ATOM	9135	OE1	GLN	1353	-14.339	3.948	60.405	1.00	39.42
ATOM	9136	NE2	GLN	1353	-15.656	5.703	59.929	1.00	39.06
ATOM	9137	C	GLN	1353	-18.568	2.038	61.678	1.00	32.00
ATOM	9138	O	GLN	1353	-18.839	1.006	62.289	1.00	32.23
ATOM	9139	N	GLY	1354	-19.497	2.810	61.124	1.00	32.12
ATOM	9140	CA	GLY	1354	-20.901	2.445	61.207	1.00	32.69
ATOM	9141	C	GLY	1354	-21.624	2.931	62.453	1.00	33.83
ATOM	9142	O	GLY	1354	-22.812	2.658	62.634	1.00	33.12
ATOM	9143	N	ARG	1355	-20.912	3.646	63.317	1.00	33.73
ATOM	9144	CA	ARG	1355	-21.509	4.168	64.538	1.00	35.35
ATOM	9145	CB	ARG	1355	-20.420	4.610	65.523	1.00	36.22
ATOM	9146	CG	ARG	1355	-19.601	3.469	66.116	1.00	37.99
ATOM	9147	CD	ARG	1355	-19.623	3.530	67.636	1.00	37.53
ATOM	9148	NE	ARG	1355	-18.923	2.412	68.266	1.00	38.27
ATOM	9149	CZ	ARG	1355	-17.601	2.278	68.305	1.00	37.61
ATOM	9150	NH1	ARG	1355	-16.819	3.195	67.752	1.00	38.90
ATOM	9151	NH2	ARG	1355	-17.062	1.228	68.905	1.00	38.50
ATOM	9152	C	ARG	1355	-22.417	5.353	64.221	1.00	34.99
ATOM	9153	O	ARG	1355	-21.988	6.326	63.601	1.00	33.87
ATOM	9154	N	GLY	1356	-23.673	5.268	64.645	1.00	35.30
ATOM	9155	CA	GLY	1356	-24.603	6.353	64.388	1.00	36.39
ATOM	9156	C	GLY	1356	-25.609	5.991	63.316	1.00	36.56
ATOM	9157	O	GLY	1356	-25.403	5.044	62.556	1.00	37.08
ATOM	9158	N	ASP	1357	-26.704	6.741	63.251	1.00	35.94
ATOM	9159	CA	ASP	1357	-27.730	6.470	62.257	1.00	35.55
ATOM	9160	CB	ASP	1357	-29.029	7.206	62.596	1.00	38.36
ATOM	9161	CG	ASP	1357	-29.677	6.687	63.863	1.00	39.91
ATOM	9162	OD1	ASP	1357	-29.647	5.458	64.092	1.00	41.41
ATOM	9163	OD2	ASP	1357	-30.229	7.504	64.624	1.00	42.41
ATOM	9164	C	ASP	1357	-27.280	6.860	60.859	1.00	33.61
ATOM	9165	O	ASP	1357	-27.444	6.092	59.915	1.00	34.09
ATOM	9166	N	GLU	1358	-26.710	8.051	60.723	1.00	31.82
ATOM	9167	CA	GLU	1358	-26.257	8.517	59.419	1.00	32.56
ATOM	9168	CB	GLU	1358	-25.702	9.938	59.531	1.00	35.82
ATOM	9169	CG	GLU	1358	-25.286	10.550	58.206	1.00	41.80
ATOM	9170	CD	GLU	1358	-24.844	11.992	58.347	1.00	44.28
ATOM	9171	OE1	GLU	1358	-25.675	12.835	58.748	1.00	47.82
ATOM	9172	OE2	GLU	1358	-23.665	12.286	58.062	1.00	47.55
ATOM	9173	C	GLU	1358	-25.203	7.584	58.819	1.00	31.25
ATOM	9174	O	GLU	1358	-25.300	7.199	57.652	1.00	29.54
ATOM	9175	N	ALA	1359	-24.205	7.218	59.619	1.00	28.61
ATOM	9176	CA	ALA	1359	-23.141	6.327	59.162	1.00	26.73
ATOM	9177	CB	ALA	1359	-22.033	6.251	60.213	1.00	27.02
ATOM	9178	C	ALA	1359	-23.694	4.931	58.887	1.00	25.02
ATOM	9179	O	ALA	1359	-23.314	4.281	57.910	1.00	25.54
ATOM	9180	N	GLY	1360	-24.591	4.483	59.759	1.00	22.90
ATOM	9181	CA	GLY	1360	-25.191	3.171	59.606	1.00	22.42
ATOM	9182	C	GLY	1360	-26.036	3.070	58.350	1.00	23.63
ATOM	9183	O	GLY	1360	-25.874	2.143	57.552	1.00	21.50
ATOM	9184	N	ASP	1361	-26.940	4.029	58.175	1.00	23.37
ATOM	9185	CA	ASP	1361	-27.809	4.055	57.010	1.00	24.97
ATOM	9186	CB	ASP	1361	-28.776	5.242	57.082	1.00	25.15
ATOM	9187	CG	ASP	1361	-29.778	5.109	58.212	1.00	25.98
ATOM	9188	OD1	ASP	1361	-30.037	3.963	58.634	1.00	24.04
ATOM	9189	OD2	ASP	1361	-30.312	6.148	58.662	1.00	26.75
ATOM	9190	C	ASP	1361	-27.001	4.128	55.715	1.00	24.67
ATOM	9191	O	ASP	1361	-27.418	3.599	54.682	1.00	23.97

ATOM	9192	N	GLN	1362	-25.843	4.775	55.763	1.00	23.06
ATOM	9193	CA	GLN	1362	-25.021	4.882	54.563	1.00	23.44
ATOM	9194	CB	GLN	1362	-23.890	5.896	54.766	1.00	23.04
ATOM	9195	CG	GLN	1362	-23.177	6.276	53.474	1.00	25.55
ATOM	9196	CD	GLN	1362	-24.113	6.925	52.464	1.00	29.06
ATOM	9197	OE1	GLN	1362	-24.758	7.933	52.760	1.00	28.92
ATOM	9198	NE2	GLN	1362	-24.195	6.345	51.266	1.00	29.63
ATOM	9199	C	GLN	1362	-24.439	3.519	54.194	1.00	23.54
ATOM	9200	O	GLN	1362	-24.409	3.157	53.019	1.00	23.64
ATOM	9201	N	LEU	1363	-23.984	2.764	55.190	1.00	24.10
ATOM	9202	CA	LEU	1363	-23.418	1.441	54.932	1.00	25.78
ATOM	9203	CB	LEU	1363	-22.840	0.831	56.214	1.00	27.37
ATOM	9204	CG	LEU	1363·	-21.488	1.337	56.715	1.00	30.02
ATOM	9205	CD1	LEU	1363	-21.078	0.539	57.948	1.00	29.46
ATOM	9206	CD2	LEU	1363	-20.436	1.184	55.628	1.00	30.43
ATOM	9207	C	LEU	1363	-24.453	0.485	54.354	1.00	25.61
ATOM	9208	O	LEU	1363	-24.186	-0.215	53.378	1.00	24.86
ATOM	9209	N	LEU	1364	-25.633	0.446	54.965	1.00	25.26
ATOM	9210	CA	LEU	1364	-26.690	-0.433	54.486	1.00	25.78
ATOM	9211	CB	LEU	1364	-27.940	-0.270	55.355	1.00	28.25
ATOM	9212	CG	LEU	1364	-28.877	-1.483	55.466	1.00	30.43
ATOM	9213	CD1	LEU	1364	-29.981	-1.183	56.470	1.00	33.01
ATOM	9214	CD2	LEU	1364	-29.468	-1.809	54.117	1.00	31.42
ATOM	9215	C	LEU	1364	-26.996	-0.081	53.030	1.00	24.42
ATOM	9216	O	LEU	1364	-27.124	-0.963	52.180	1.00	24.75
ATOM	9217	N	SER	1365	-27.091	1.216	52.748	1.00	24.25
ATOM	9218	CA	SER	1365	-27.372	1.696	51.399	1.00	22.74
ATOM	9219	CB	SER	1365	-27.440	3.226	51.388	1.00	25.49
ATOM	9220	OG	SER	1365	-27.711	3.713	50.085	1.00	30.28
ATOM	9221	C	SER	1365	-26.288	1.225	50.436	1.00	20.66
ATOM	9222	O	SER	1365	-26.581	0.731	49.343	1.00	17.79
ATOM	9223	N	ASP	1366	-25.033	1.397	50.841	1.00	19.04
ATOM	9224	CA	ASP	1366	-23.902	0.971	50.013	1.00	18.22
ATOM	9225	CB	ASP	1366	-22.564	1.389	50.645	1.00	19.61
ATOM	9226	CG	ASP	1366	-22.294	2.890	50.553	1.00	20.96
ATOM	9227	OD1	ASP	1366	-22.831	3.569	49.652	1.00	20.14
ATOM	9228	OD2	ASP	1366	-21.508	3.393	51.384	1.00	19.72
ATOM	9229	C	ASP	1366	-23.914	-0.547	49.824	1.00	16.69
ATOM	9230	O	ASP	1366	-23.643	-1.040	48.728	1.00	18.02
ATOM	9231	N	ALA	1367	-24.216	-1.291	50.885	1.00	15.72
ATOM	9232	CA	ALA	1367	-24.244	-2.748	50.783	1.00	16.03
ATOM	9233	CB	ALA	1367	-24.598	-3.372	52.136	1.00	16.32
ATOM	9234	C	ALA	1367	-25.245	-3.181	49.717	1.00	17.08
ATOM	9235	O	ALA	1367	-24.944	-4.032	48.878	1.00	15.80
ATOM	9236	N	LEU	1368	-26.436	-2.588	49.745	1.00	16.63
ATOM	9237	CA	LEU	1368	-27.473	-2.902	48.759	1.00	15.83
ATOM	9238	CB	LEU	1368	-28.775	-2.201	49.131	1.00	17.90
ATOM	9239	CG	LEU	1368	-29.457	-2.782	50.363	1.00	18.04
ATOM	9240	CD1	LEU	1368	-30.451	-1.771	50.910	1.00	22.56
ATOM	9241	CD2	LEU	1368	-30.137	-4.097	49.992	1.00	18.80
ATOM	9242	C	LEU	1368	-27.060	-2.475	47.360	1.00	15.44
ATOM	9243	O	LEU	1368	-27.309	-3.189	46.390	1.00	17.08
ATOM	9244	N	ALA	1369	-26.437	-1.304	47.265	1.00	15.14
ATOM	9245	CA	ALA	1369	-25.985	-0.781	45.984	1.00	15.71
ATOM	9246	CB	ALA	1369	-25.393	0.609	46.164	1.00	16.16
ATOM	9247	C	ALA	1369	-24.948	-1.714	45.372	1.00	15.06
ATOM	9248	O	ALA	1369	-24.979	-1.985	44.172	1.00	13.93
ATOM	9249	N	LEU	1370	-24.025	-2.201	46.196	1.00	15.56
ATOM	9250	CA	LEU	1370	-22.990	-3.106	45.702	1.00	15.57
ATOM	9251	CB	LEU	1370	-21.962	-3.389	46.805	1.00	17.04
ATOM	9252	CG	LEU	1370	-21.115	-2.176	47.231	1.00	17.64
ATOM	9253	CD1	LEU	1370	-20.257	-2.520	48.450	1.00	14.36
ATOM	9254	CD2	LEU	1370	-20.236	-1.745	46.077	1.00	17.55
ATOM	9255	C	LEU	1370	-23.639	-4.395	45.228	1.00	16.16
ATOM	9256	O	LEU	1370	-23.306	-4.917	44.160	1.00	14.48
ATOM	9257	N	GLU	1371	-24.573	-4.912	46.020	1.00	15.93
ATOM	9258	CA	GLU	1371	-25.269	-6.142	45.647	1.00	16.46
ATOM	9259	CB	GLU	1371	-26.264	-6.540	46.745	1.00	17.16
ATOM	9260	CG	GLU	1371	-27.134	-7.735	46.381	1.00	20.30
ATOM	9261	CD	GLU	1371	-28.084	-8.098	47.491	1.00	19.27
ATOM	9262	OE1	GLU	1371	-28.878	-7.224	47.897	1.00	18.29
ATOM	9263	OE2	GLU	1371	-28.029	-9.248	47.964	1.00	23.87
ATOM	9264	C	GLU	1371	-26.007	-5.960	44.319	1.00	16.54
ATOM	9265	O	GLU	1371	-25.894	-6.789	43.409	1.00	16.17
ATOM	9266	N	ALA	1372	-26.757	-4.869	44.205	1.00	16.06
ATOM	9267	CA	ALA	1372	-27.516	-4.601	42.987	1.00	16.73
ATOM	9268	CB	ALA	1372	-28.354	-3.328	43.161	1.00	16.45

ATOM	9269	C	ALA	1372	-26.585	-4.460	41.790	1.00	16.56
ATOM	9270	O	ALA	1372	-26.953	-4.791	40.660	1.00	15.51
ATOM	9271	N	ALA	1373	-25.377	-3.961	42.044	1.00	14.61
ATOM	9272	CA	ALA	1373	-24.382	-3.758	40.987	1.00	14.87
ATOM	9273	CB	ALA	1373	-23.253	-2.858	41.507	1.00	15.59
ATOM	9274	C	ALA	1373	-23.804	-5.077	40.477	1.00	14.66
ATOM	9275	O	ALA	1373	-23.232	-5.133	39.386	1.00	15.82
ATOM	9276	N	GLY	1374	-23.935	-6.132	41.273	1.00	14.12
ATOM	9277	CA	GLY	1374	-23.427	-7.423	40.846	1.00	14.74
ATOM	9278	C	GLY	1374	-22.460	-8.120	41.789	1.00	15.58
ATOM	9279	O	GLY	1374	-22.046	-9.250	41.513	1.00	17.25
ATOM	9280	N	ALA	1375	-22.081	-7.468	42.888	1.00	15.59
ATOM	9281	CA	ALA	1375	-21.167	-8.098	43.847	1.00	15.31
ATOM	9282	CB	ALA	1375	-20.901	-7.167	45.031	1.00	12.55
ATOM	9283	C	ALA	1375	-21.815	-9.390	44.336	1.00	15.80
ATOM	9284	O	ALA	1375	-23.000	-9.408	44.659	1.00	17.75
ATOM	9285	N	GLN	1376	-21.041	-10.469	44.393	1.00	16.08
ATOM	9286	CA	GLN	1376	-21.584	-11.756	44.825	1.00	16.60
ATOM	9287	CB	GLN	1376	-21.090	-12.857	43.887	1.00	16.95
ATOM	9288	CG	GLN	1376	-21.526	-12.625	42.441	1.00	22.74
ATOM	9289	CD	GLN	1376	-20.999	-13.668	41.484	1.00	24.07
ATOM	9290	OE1	GLN	1376	-21.457	-14.809	41.477	1.00	29.42
ATOM	9291	NE2	GLN	1376	-20.030	-13.281	40.665	1.00	27.21
ATOM	9292	C	GLN	1376	-21.217	-12.076	46.269	1.00	17.00
ATOM	9293	O	GLN	1376	-21.664	-13.079	46.829	1.00	17.05
ATOM	9294	N	LEU	1377	-20.411	-11.199	46.860	1.00	14.88
ATOM	9295	CA	LEU	1377	-19.958	-11.337	48.232	1.00	16.52
ATOM	9296	CB	LEU	1377	-18.675	-12.164	48.280	1.00	21.20
ATOM	9297	CG	LEU	1377	-18.797	-13.672	48.435	1.00	22.45
ATOM	9298	CD1	LEU	1377	-17.441	-14.317	48.174	1.00	22.86
ATOM	9299	CD2	LEU	1377	-19.279	-13.991	49.840	1.00	22.77
ATOM	9300	C	LEU	1377	-19.674	-9.964	48.807	1.00	15.17
ATOM	9301	O	LEU	1377	-19.404	-9.017	48.068	1.00	15.26
ATOM	9302	N	LEU	1378	-19.734	-9.856	50.129	1.00	15.03
ATOM	9303	CA	LEU	1378	-19.445	-8.588	50.792	1.00	15.26
ATOM	9304	CB	LEU	1378	-20.750	-7.840	51.099	1.00	15.07
ATOM	9305	CG	LEU	1378	-20.584	-6.620	52.011	1.00	15.89
ATOM	9306	CD1	LEU	1378	-19.891	-5.491	51.246	1.00	17.24
ATOM	9307	CD2	LEU	1378	-21.961	-6.154	52.507	1.00	19.57
ATOM	9308	C	LEU	1378	-18.679	-8.808	52.090	1.00	15.81
ATOM	9309	O	LEU	1378	-19.048	-9.656	52.900	1.00	16.07
ATOM	9310	N	VAL	1379	-17.599	-8.060	52.282	1.00	16.13
ATOM	9311	CA	VAL	1379	-16.845	-8.160	53.523	1.00	16.26
ATOM	9312	CB	VAL	1379	-15.297	-8.136	53.275	1.00	14.82
ATOM	9313	CG1	VAL	1379	-14.567	-7.886	54.588	1.00	14.92
ATOM	9314	CG2	VAL	1379	-14.830	-9.493	52.691	1.00	13.84
ATOM	9315	C	VAL	1379	-17.245	-6.955	54.383	1.00	16.23
ATOM	9316	O	VAL	1379	-17.366	-5.838	53.876	1.00	14.40
ATOM	9317	N	LEU	1380	-17.502	-7.200	55.667	1.00	17.52
ATOM	9318	CA	LEU	1380	-17.869	-6.150	56.626	1.00	18.33
ATOM	9319	CB	LEU	1380	-19.228	-6.426	57.264	1.00	23.25
ATOM	9320	CG	LEU	1380	-20.451	-5.763	56.649	1.00	27.26
ATOM	9321	CD1	LEU	1380	-21.679	-6.205	57.436	1.00	29.17
ATOM	9322	CD2	LEU	1380	-20.310	-4.237	56.689	1.00	28.64
ATOM	9323	C	LEU	1380	-16.820	-6.151	57.729	1.00	17.93
ATOM	9324	O	LEU	1380	-16.671	-7.142	58.438	1.00	17.27
ATOM	9325	N	GLU	1381	-16.126	-5.032	57.901	1.00	18.24
ATOM	9326	CA	GLU	1381	-15.058	-4.951	58.890	1.00	18.15
ATOM	9327	CB	GLU	1381	-13.735	-4.706	58.154	1.00	19.99
ATOM	9328	CG	GLU	1381	-12.535	-4.399	59.042	1.00	19.58
ATOM	9329	CD	GLU	1381	-11.214	-4.485	58.288	1.00	21.41
ATOM	9330	OE1	GLU	1381	-11.236	-4.456	57.042	1.00	20.29
ATOM	9331	OE2	GLU	1381	-10.152	-4.579	58.939	1.00	22.00
ATOM	9332	C	GLU	1381	-15.222	-3.910	59.995	1.00	18.95
ATOM	9333	O	GLU	1381	-15.451	-2.733	59.725	1.00	17.56
ATOM	9334	N	CYS	1382	-15.094	-4.355	61.242	1.00	18.95
ATOM	9335	CA	CYS	1382	-15.168	-3.456	62.388	1.00	20.18
ATOM	9336	CB	CYS	1382	-13.858	-2.676	62.501	1.00	20.94
ATOM	9337	SG	CYS	1382	-12.444	-3.736	62.885	1.00	25.87
ATOM	9338	C	CYS	1382	-16.344	-2.488	62.383	1.00	19.45
ATOM	9339	O	CYS	1382	-16.181	-1.279	62.191	1.00	19.01
ATOM	9340	N	VAL	1383	-17.523	-3.038	62.631	1.00	20.89
ATOM	9341	CA	VAL	1383	-18.753	-2.272	62.665	1.00	21.85
ATOM	9342	CB	VAL	1383	-19.513	-2.440	61.324	1.00	23.50
ATOM	9343	CG1	VAL	1383	-20.222	-3.785	61.286	1.00	18.79
ATOM	9344	CG2	VAL	1383	-20.471	-1.295	61.113	1.00	26.50
ATOM	9345	C	VAL	1383	-19.576	-2.863	63.809	1.00	22.30

ATOM	9346	O	VAL	1383	-19.434	-4.042	64.131	1.00	22.63
ATOM	9347	N	PRO	1384	-20.432	-2.050	64.454	1.00	22.70
ATOM	9348	CD	PRO	1384	-20.747	-0.631	64.237	1.00	21.90
ATOM	9349	CA	PRO	1384	-21.231	-2.608	65.548	1.00	23.71
ATOM	9350	CB	PRO	1384	-22.140	-1.441	65.952	1.00	24.27
ATOM	9351	CG	PRO	1384	-22.162	-0.556	64.735	1.00	26.55
ATOM	9352	C	PRO	1384	-22.009	-3.841	65.101	1.00	24.45
ATOM	9353	O	PRO	1384	-22.470	-3.914	63.961	1.00	23.74
ATOM	9354	N	VAL	1385	-22.140	-4.808	66.003	1.00	24.71
ATOM	9355	CA	VAL	1385	-22.856	-6.050	65.727	1.00	26.23
ATOM	9356	CB	VAL	1385	-22.984	-6.917	66.991	1.00	27.89
ATOM	9357	CG1	VAL	1385	-23.606	-8.261	66.632	1.00	27.76
ATOM	9358	CG2	VAL	1385	-21.626	-7.101	67.635	1.00	29.95
ATOM	9359	C	VAL	1385	-24.263	-5.783	65.219	1.00	27.91
ATOM	9360	O	VAL	1385	-24.772	-6.513	64.366	1.00	27.26
ATOM	9361	N	GLU	1386	-24.884	-4.734	65.754	1.00	27.87
ATOM	9362	CA	GLU	1386	-26.241	-4.372	65.367	1.00	30.32
ATOM	9363	CB	GLU	1386	-26.717	-3.129	66.133	1.00	31.48
ATOM	9364	CG	GLU	1386	-26.182	-2.988	67.553	1.00	37.12
ATOM	9365	CD	GLU	1386	-26.077	-4.309	68.280	1.00	39.44
ATOM	9366	OE1	GLU	1386	-27.084	-5.051	68.325	1.00	42.32
ATOM	9367	OE2	GLU	1386	-24.984	-4.599	68.810	1.00	40.64
ATOM	9368	C	GLU	1386	-26.291	-4.088	63.872	1.00	29.04
ATOM	9369	O	GLU	1386	-27.157	-4.601	63.168	1.00	29.05
ATOM	9370	N	LEU	1387	-25.353	-3.271	63.396	1.00	27.86
ATOM	9371	CA	LEU	1387	-25.290	-2.912	61.982	1.00	26.77
ATOM	9372	CB	LEU	1387	-24.193	-1.870	61.740	1.00	29.38
ATOM	9373	CG	LEU	1387	-24.497	-0.767	60.722	1.00	31.48
ATOM	9374	CD1	LEU	1387	-23.294	0.148	60.577	1.00	29.59
ATOM	9375	CD2	LEU	1387	-24.876	-1.369	59.391	1.00	33.03
ATOM	9376	C	LEU	1387	-25.019	-4.148	61.128	1.00	26.22
ATOM	9377	O	LEU	1387	-25.637	-4.338	60.079	1.00	24.83
ATOM	9378	N	ALA	1388	-24.082	-4.982	61.572	1.00	24.74
ATOM	9379	CA	ALA	1388	-23.758	-6.199	60.846	1.00	23.61
ATOM	9380	CB	ALA	1388	-22.736	-7.022	61.625	1.00	21.94
ATOM	9381	C	ALA	1388	-25.041	-7.002	60.648	1.00	23.83
ATOM	9382	O	ALA	1388	-25.301	-7.517	59.560	1.00	20.30
ATOM	9383	N	LYS	1389	-25.844	-7.096	61.705	1.00	25.43
ATOM	9384	CA	LYS	1389	-27.114	-7.824	61.656	1.00	27.87
ATOM	9385	CB	LYS	1389	-27.853	-7.694	62.992	1.00	32.12
ATOM	9386	CG	LYS	1389	-27.057	-8.133	64.203	1.00	38.20
ATOM	9387	CD	LYS	1389	-27.773	-7.773	65.500	1.00	41.46
ATOM	9388	CE	LYS	1389	-26.986	-8.255	66.710	1.00	43.04
ATOM	9389	NZ	LYS	1389	-27.588	-7.817	67.999	1.00	44.99
ATOM	9390	C	LYS	1389	-27.999	-7.252	60.556	1.00	26.60
ATOM	9391	O	LYS	1389	-28.522	-7.984	59.716	1.00	26.86
ATOM	9392	N	ARG	1390	-28.160	-5.932	60.580	1.00	26.01
ATOM	9393	CA	ARG	1390	-28.980	-5.216	59.608	1.00	25.62
ATOM	9394	CB	ARG	1390	-28.846	-3.704	59.830	1.00	28.15
ATOM	9395	CG	ARG	1390	-28.910	-3.255	61.284	1.00	33.06
ATOM	9396	CD	ARG	1390	-30.061	-2.299	61.530	1.00	31.58
ATOM	9397	NE	ARG	1390	-30.047	-1.150	60.627	1.00	34.15
ATOM	9398	CZ	ARG	1390	-29.289	-0.068	60.782	1.00	33.40
ATOM	9399	NH1	ARG	1390	-28.466	0.031	61.818	1.00	35.42
ATOM	9400	NH2	ARG	1390	-29.361	0.924	59.901	1.00	33.81
ATOM	9401	C	ARG	1390	-28.566	-5.541	58.175	1.00	24.93
ATOM	9402	O	ARG	1390	-29.394	-5.896	57.332	1.00	21.80
ATOM	9403	N	ILE	1391	-27.271	-5.407	57.904	1.00	24.32
ATOM	9404	CA	ILE	1391	-26.736	-5.663	56.570	1.00	23.53
ATOM	9405	CB	ILE	1391	-25.248	-5.277	56.501	1.00	24.79
ATOM	9406	CG2	ILE	1391	-24.677	-5.627	55.130	1.00	22.88
ATOM	9407	CG1	ILE	1391	-25.098	-3.779	56.789	1.00	24.38
ATOM	9408	CD1	ILE	1391	-23.661	-3.314	56.863	1.00	30.37
ATOM	9409	C	ILE	1391	-26.900	-7.114	56.125	1.00	23.92
ATOM	9410	O	ILE	1391	-27.323	-7.383	55.001	1.00	22.87
ATOM	9411	N	THR	1392	-26.570	-8.053	57.003	1.00	23.07
ATOM	9412	CA	THR	1392	-26.691	-9.463	56.654	1.00	24.09
ATOM	9413	CB	THR	1392	-26.165	-10.362	57.801	1.00	25.31
ATOM	9414	OG1	THR	1392	-24.790	-10.043	58.052	1.00	24.75
ATOM	9415	CG2	THR	1392	-26.263	-11.842	57.424	1.00	21.60
ATOM	9416	C	THR	1392	-28.133	-9.844	56.309	1.00	25.62
ATOM	9417	O	THR	1392	-28.371	-10.658	55.411	1.00	24.15
ATOM	9418	N	GLU	1393	-29.095	-9.253	57.013	1.00	25.81
ATOM	9419	CA	GLU	1393	-30.505	-9.540	56.754	1.00	28.50
ATOM	9420	CB	GLU	1393	-31.358	-9.159	57.966	1.00	30.65
ATOM	9421	CG	GLU	1393	-31.271	-10.140	59.124	1.00	35.02
ATOM	9422	CD	GLU	1393	-32.129	-9.716	60.300	1.00	38.65

ATOM	9423	OE1	GLU	1393	-33.335	-9.449	60.089	1.00	40.37
ATOM	9424	OE2	GLU	1393	-31.602	-9.652	61.435	1.00	39.76
ATOM	9425	C	GLU	1393	-31.038	-8.818	55.520	1.00	27.06
ATOM	9426	O	GLU	1393	-31.907	-9.337	54.820	1.00	28.64
ATOM	9427	N	ALA	1394	-30.515	-7.627	55.254	1.00	24.47
ATOM	9428	CA	ALA	1394	-30.961	-6.847	54.110	1.00	24.04
ATOM	9429	CB	ALA	1394	-30.508	-5.394	54.265	1.00	22.66
ATOM	9430	C	ALA	1394	-30.467	-7.411	52.782	1.00	24.13
ATOM	9431	O	ALA	1394	-31.165	-7.322	51.768	1.00	22.55
ATOM	9432	N	LEU	1395	-29.270	-7.995	52.790	1.00	23.16
ATOM	9433	CA	LEU	1395	-28.682	-8.551	51.571	1.00	22.35
ATOM	9434	CB	LEU	1395	-27.169	-8.307	51.557	1.00	23.06
ATOM	9435	CG	LEU	1395	-26.678	-6.859	51.608	1.00	24.33
ATOM	9436	CD1	LEU	1395	-25.165	-6.854	51.357	1.00	23.88
ATOM	9437	CD2	LEU	1395	-27.386	-6.016	50.579	1.00	26.78
ATOM	9438	C	LEU	1395	-28.939	-10.036	51.352	1.00	20.89
ATOM	9439	O	LEU	1395	-28.995	-10.815	52.298	1.00	20.06
ATOM	9440	N	ALA	1396	-29.091	-10.416	50.085	1.00	20.42
ATOM	9441	CA	ALA	1396	-29.330	-11.805	49.716	1.00	21.29
ATOM	9442	CB	ALA	1396	-30.126	-11.871	48.413	1.00	19.07
ATOM	9443	C	ALA	1396	-28.005	-12.548	49.552	1.00	20.66
ATOM	9444	O	ALA	1396	-27.916	-13.753	49.809	1.00	19.21
ATOM	9445	N	ILE	1397	-26.976	-11.823	49.116	1.00	19.78
ATOM	9446	CA	ILE	1397	-25.650	-12.405	48.933	1.00	20.20
ATOM	9447	CB	ILE	1397	-24.721	-11.463	48.134	1.00	19.10
ATOM	9448	CG2	ILE	1397	-25.280	-11.237	46.742	1.00	19.43
ATOM	9449	CG1	ILE	1397	-24.561	-10.139	48.875	1.00	17.71
ATOM	9450	CD1	ILE	1397	-23.568	-9.181	48.227	1.00	18.82
ATOM	9451	C	ILE	1397	-25.020	-12.649	50.299	1.00	20.56
ATOM	9452	O	ILE	1397	-25.389	-12.008	51.282	1.00	21.78
ATOM	9453	N	PRO	1398	-24.066	-13.586	50.381	1.00	22.06
ATOM	9454	CD	PRO	1398	-23.622	-14.529	49.342	1.00	22.24
ATOM	9455	CA	PRO	1398	-23.419	-13.871	51.661	1.00	22.34
ATOM	9456	CB	PRO	1398	-22.633	-15.150	51.373	1.00	23.09
ATOM	9457	CG	PRO	1398	-22.353	-15.057	49.917	1.00	26.50
ATOM	9458	C	PRO	1398	-22.546	-12.728	52.168	1.00	21.87
ATOM	9459	O	PRO	1398	-21.840	-12.075	51.394	1.00	21.73
ATOM	9460	N	VAL	1399	-22.621	-12.479	53.472	1.00	21.04
ATOM	9461	CA	VAL	1399	-21.845	-11.423	54.102	1.00	20.62
ATOM	9462	CB	VAL	1399	-22.750	-10.465	54.918	1.00	21.23
ATOM	9463	CG1	VAL	1399	-21.906	-9.373	55.569	1.00	20.53
ATOM	9464	CG2	VAL	1399	-23.796	-9.833	54.007	1.00	21.96
ATOM	9465	C	VAL	1399	-20.793	-12.033	55.021	1.00	20.44
ATOM	9466	O	VAL	1399	-21.115	-12.798	55.938	1.00	19.55
ATOM	9467	N	ILE	1400	-19.536	-11.694	54.751	1.00	20.90
ATOM	9468	CA	ILE	1400	-18.392	-12.181	55.522	1.00	19.21
ATOM	9469	CB	ILE	1400	-17.218	-12.559	54.590	1.00	20.36
ATOM	9470	CG2	ILE	1400	-16.008	-12.966	55.418	1.00	20.56
ATOM	9471	CG1	ILE	1400	-17.643	-13.705	53.668	1.00	22.22
ATOM	9472	CD1	ILE	1400	-16.590	-14.082	52.643	1.00	24.06
ATOM	9473	C	ILE	1400	-17.924	-11.083	56.462	1.00	19.24
ATOM	9474	O	ILE	1400	-17.585	-9.985	56.026	1.00	17.97
ATOM	9475	N	GLY	1401	-17.898	-11.380	57.754	1.00	17.48
ATOM	9476	CA	GLY	1401	-17.484	-10.368	58.700	1.00	17.76
ATOM	9477	C	GLY	1401	-16.182	-10.615	59.429	1.00	17.82
ATOM	9478	O	GLY	1401	-15.731	-11.746	59.583	1.00	18.37
ATOM	9479	N	ILE	1402	-15.567	-9.519	59.846	1.00	17.14
ATOM	9480	CA	ILE	1402	-14.342	-9.549	60.622	1.00	19.20
ATOM	9481	CB	ILE	1402	-13.061	-9.437	59.731	1.00	17.10
ATOM	9482	CG2	ILE	1402	-13.207	-8.319	58.708	1.00	19.67
ATOM	9483	CG1	ILE	1402	-11.844	-9.222	60.626	1.00	22.25
ATOM	9484	CD1	ILE	1402	-10.521	-9.488	59.939	1.00	21.22
ATOM	9485	C	ILE	1402	-14.477	-8.359	61.562	1.00	17.66
ATOM	9486	O	ILE	1402	-14.489	-7.202	61.134	1.00	21.00
ATOM	9487	N	GLY	1403	-14.616	-8.646	62.849	1.00	18.73
ATOM	9488	CA	GLY	1403	-14.800	-7.572	63.805	1.00	19.62
ATOM	9489	C	GLY	1403	-16.208	-7.017	63.675	1.00	20.89
ATOM	9490	O	GLY	1403	-16.457	-5.837	63.934	1.00	20.69
ATOM	9491	N	ALA	1404	-17.137	-7.871	63.259	1.00	20.95
ATOM	9492	CA	ALA	1404	-18.529	-7.452	63.100	1.00	22.83
ATOM	9493	CB	ALA	1404	-18.881	-7.354	61.614	1.00	24.62
ATOM	9494	C	ALA	1404	-19.502	-8.391	63.807	1.00	24.35
ATOM	9495	O	ALA	1404	-20.706	-8.344	63.558	1.00	24.70
ATOM	9496	N	GLY	1405	-18.980	-9.246	64.685	1.00	24.62
ATOM	9497	CA	GLY	1405	-19.833	-10.170	65.411	1.00	25.54
ATOM	9498	C	GLY	1405	-20.075	-11.478	64.683	1.00	26.30
ATOM	9499	O	GLY	1405	-19.573	-11.681	63.581	1.00	27.10

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ATOM   9500  N   ASN  1406   -20.854 -12.367  65.297  1.00 25.69
ATOM   9501  CA  ASN  1406   -21.149 -13.670  64.701  1.00 25.78
ATOM   9502  CB  ASN  1406   -21.144 -14.756  65.781  1.00 26.59
ATOM   9503  CG  ASN  1406   -22.323 -14.641  66.745  1.00 28.85
ATOM   9504  OD1 ASN  1406   -22.638 -15.586  67.470  1.00 29.88
ATOM   9505  ND2 ASN  1406   -22.972 -13.481  66.760  1.00 25.54
ATOM   9506  C   ASN  1406   -22.481 -13.713  63.952  1.00 24.77
ATOM   9507  O   ASN  1406   -22.956 -14.787  63.579  1.00 25.44
ATOM   9508  N   VAL  1407   -23.071 -12.541  63.725  1.00 24.74
ATOM   9509  CA  VAL  1407   -24.354 -12.434  63.033  1.00 25.37
ATOM   9510  CB  VAL  1407   -25.064 -11.118  63.402  1.00 25.71
ATOM   9511  CG1 VAL  1407   -26.505 -11.144  62.893  1.00 31.10
ATOM   9512  CG2 VAL  1407   -25.040 -10.917  64.913  1.00 27.35
ATOM   9513  C   VAL  1407   -24.224 -12.497  61.512  1.00 25.31
ATOM   9514  O   VAL  1407   -25.223 -12.591  60.790  1.00 24.78
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ATOM   9516  CA  THR  1408   -22.753 -12.490  59.591  1.00 21.03
ATOM   9517  CB  THR  1408   -21.375 -11.874  59.238  1.00 20.01
ATOM   9518  OG1 THR  1408   -20.354 -12.456  60.064  1.00 19.12
ATOM   9519  CG2 THR  1408   -21.401 -10.382  59.460  1.00 17.17
ATOM   9520  C   THR  1408   -22.813 -13.927  59.104  1.00 21.73
ATOM   9521  O   THR  1408   -22.821 -14.867  59.908  1.00 24.16
ATOM   9522  N   ASP  1409   -22.874 -14.090  57.785  1.00 19.78
ATOM   9523  CA  ASP  1409   -22.942 -15.406  57.157  1.00 19.91
ATOM   9524  CB  ASP  1409   -23.371 -15.268  55.696  1.00 21.36
ATOM   9525  CG  ASP  1409   -24.712 -14.600  55.553  1.00 22.44
ATOM   9526  OD1 ASP  1409   -25.693 -15.136  56.107  1.00 22.97
ATOM   9527  OD2 ASP  1409   -24.786 -13.536  54.899  1.00 25.06
ATOM   9528  C   ASP  1409   -21.600 -16.112  57.211  1.00 19.51
ATOM   9529  O   ASP  1409   -21.533 -17.342  57.236  1.00 18.44
ATOM   9530  N   GLY  1410   -20.534 -15.323  57.219  1.00 21.88
ATOM   9531  CA  GLY  1410   -19.204 -15.899  57.269  1.00 20.44
ATOM   9532  C   GLY  1410   -18.249 -15.097  58.124  1.00 19.85
ATOM   9533  O   GLY  1410   -18.589 -14.013  58.594  1.00 18.97
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ATOM   9535  CA  GLN  1411   -16.011 -15.002  59.116  1.00 20.00
ATOM   9536  CB  GLN  1411   -15.817 -15.730  60.447  1.00 19.91
ATOM   9537  CG  GLN  1411   -16.981 -15.636  61.417  1.00 19.40
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ATOM   9539  OE1 GLN  1411   -16.414 -13.434  62.153  1.00 18.73
ATOM   9540  NE2 GLN  1411   -18.578 -13.859  61.752  1.00 18.43
ATOM   9541  C   GLN  1411   -14.676 -15.014  58.382  1.00 20.57
ATOM   9542  O   GLN  1411   -14.421 -15.889  57.558  1.00 19.66
ATOM   9543  N   ILE  1412   -13.824 -14.046  58.697  1.00 22.26
ATOM   9544  CA  ILE  1412   -12.501 -13.973  58.097  1.00 23.53
ATOM   9545  CB  ILE  1412   -12.530 -13.154  56.776  1.00 23.95
ATOM   9546  CG2 ILE  1412   -12.737 -11.675  57.075  1.00 24.56
ATOM   9547  CG1 ILE  1412   -11.227 -13.360  56.010  1.00 25.80
ATOM   9548  CD1 ILE  1412   -11.316 -12.973  54.543  1.00 25.24
ATOM   9549  C   ILE  1412   -11.536 -13.335  59.097  1.00 25.52
ATOM   9550  O   ILE  1412   -11.952 -12.627  60.014  1.00 23.69
ATOM   9551  N   LEU  1413   -10.248 -13.607  58.933  1.00 27.48
ATOM   9552  CA  LEU  1413    -9.243 -13.032  59.815  1.00 28.85
ATOM   9553  CB  LEU  1413    -9.351 -13.635  61.216  1.00 34.02
ATOM   9554  CG  LEU  1413    -9.299 -12.665  62.403  1.00 37.41
ATOM   9555  CD1 LEU  1413    -9.200 -13.472  63.680  1.00 39.43
ATOM   9556  CD2 LEU  1413    -8.100 -11.718  62.283  1.00 39.02
ATOM   9557  C   LEU  1413    -7.863 -13.315  59.243  1.00 28.57
ATOM   9558  O   LEU  1413    -7.692 -14.259  58.470  1.00 25.03
ATOM   9559  N   VAL  1414    -6.890 -12.485  59.610  1.00 29.11
ATOM   9560  CA  VAL  1414    -5.520 -12.662  59.147  1.00 29.08
ATOM   9561  CB  VAL  1414    -4.638 -11.435  59.483  1.00 30.55
ATOM   9562  CG1 VAL  1414    -3.238 -11.628  58.900  1.00 31.68
ATOM   9563  CG2 VAL  1414    -5.277 -10.165  58.928  1.00 31.09
ATOM   9564  C   VAL  1414    -4.961 -13.880  59.863  1.00 28.58
ATOM   9565  O   VAL  1414    -4.936 -13.928  61.092  1.00 28.63
ATOM   9566  N   MET  1415    -4.525 -14.865  59.087  1.00 26.58
ATOM   9567  CA  MET  1415    -3.976 -16.096  59.644  1.00 25.18
ATOM   9568  CB  MET  1415    -3.386 -16.959  58.527  1.00 21.68
ATOM   9569  CG  MET  1415    -2.253 -16.306  57.777  1.00 20.54
ATOM   9570  SD  MET  1415    -1.043 -17.545  57.300  1.00 21.74
ATOM   9571  CE  MET  1415    -0.091 -17.623  58.832  1.00 21.73
ATOM   9572  C   MET  1415    -2.912 -15.850  60.713  1.00 25.50
ATOM   9573  O   MET  1415    -2.793 -16.614  61.671  1.00 25.46
ATOM   9574  N   HIS  1416    -2.144 -14.778  60.548  1.00 25.98
ATOM   9575  CA  HIS  1416    -1.089 -14.440  61.496  1.00 27.03
ATOM   9576  CB  HIS  1416    -0.294 -13.242  60.974  1.00 26.14
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ATOM	9577	CG	HIS	1416	0.482	-13.542	59.726	1.00	26.99
ATOM	9578	CD2	HIS	1416	0.121	-13.513	58.421	1.00	25.19
ATOM	9579	ND1	HIS	1416	1.782	-14.002	59.750	1.00	25.73
ATOM	9580	CE1	HIS	1416	2.188	-14.243	58.517	1.00	24.78
ATOM	9581	NE2	HIS	1416	1.198	-13.954	57.690	1.00	27.44
ATOM	9582	C	HIS	1416	-1.651	-14.163	62.889	1.00	28.75
ATOM	9583	O	HIS	1416	-1.076	-14.598	63.887	1.00	27.94
ATOM	9584	N	ASP	1417	-2.773	-13.449	62.966	1.00	29.75
ATOM	9585	CA	ASP	1417	-3.386	-13.156	64.262	1.00	33.00
ATOM	9586	CB	ASP	1417	-4.458	-12.069	64.134	1.00	34.18
ATOM	9587	CG	ASP	1417	-3.886	-10.733	63.731	1.00	37.67
ATOM	9588	OD1	ASP	1417	-2.900	-10.292	64.361	1.00	39.25
ATOM	9589	OD2	ASP	1417	-4.429	-10.114	62.788	1.00	40.11
ATOM	9590	C	ASP	1417	-4.025	-14.408	64.848	1.00	33.09
ATOM	9591	O	ASP	1417	-4.130	-14.549	66.067	1.00	34.61
ATOM	9592	N	ALA	1418	-4.455	-15.312	63.974	1.00	34.01
ATOM	9593	CA	ALA	1418	-5.094	-16.552	64.399	1.00	35.06
ATOM	9594	CB	ALA	1418	-5.800	-17.207	63.208	1.00	34.52
ATOM	9595	C	ALA	1418	-4.110	-17.535	65.034	1.00	36.11
ATOM	9596	O	ALA	1418	-4.524	-18.505	65.671	1.00	36.84
ATOM	9597	N	PHE	1419	-2.813	-17.287	64.863	1.00	36.18
ATOM	9598	CA	PHE	1419	-1.791	-18.161	65.436	1.00	36.22
ATOM	9599	CB	PHE	1419	-0.999	-18.849	64.322	1.00	37.87
ATOM	9600	CG	PHE	1419	-1.861	-19.607	63.349	1.00	39.07
ATOM	9601	CD1	PHE	1419	-2.859	-20.465	63.806	1.00	38.80
ATOM	9602	CD2	PHE	1419	-1.671	-19.472	61.978	1.00	39.70
ATOM	9603	CE1	PHE	1419	-3.654	-21.176	62.914	1.00	39.60
ATOM	9604	CE2	PHE	1419	-2.461	-20.180	61.075	1.00	39.92
ATOM	9605	CZ	PHE	1419	-3.456	-21.035	61.546	1.00	40.35
ATOM	9606	C	PHE	1419	-0.838	-17.412	66.369	1.00	35.97
ATOM	9607	O	PHE	1419	0.267	-17.880	66.660	1.00	35.74
ATOM	9608	N	GLY	1420	-1.278	-16.245	66.832	1.00	35.56
ATOM	9609	CA	GLY	1420	-0.472	-15.444	67.739	1.00	34.95
ATOM	9610	C	GLY	1420	0.900	-15.079	67.205	1.00	34.01
ATOM	9611	O	GLY	1420	1.762	-14.622	67.960	1.00	33.90
ATOM	9612	N	ILE	1421	1.112	-15.278	65.908	1.00	31.41
ATOM	9613	CA	ILE	1421	2.394	-14.950	65.299	1.00	28.98
ATOM	9614	CB	ILE	1421	2.423	-15.367	63.804	1.00	28.18
ATOM	9615	CG2	ILE	1421	3.732	-14.925	63.156	1.00	24.57
ATOM	9616	CG1	ILE	1421	2.264	-16.880	63.689	1.00	26.51
ATOM	9617	CD1	ILE	1421	2.034	-17.371	62.278	1.00	26.39
ATOM	9618	C	ILE	1421	2.626	-13.447	65.411	1.00	29.18
ATOM	9619	O	ILE	1421	3.716	-12.999	65.761	1.00	27.59
ATOM	9620	N	THR	1422	1.577	-12.676	65.143	1.00	30.56
ATOM	9621	CA	THR	1422	1.654	-11.222	65.195	1.00	33.09
ATOM	9622	CB	THR	1422	0.315	-10.585	64.796	1.00	34.07
ATOM	9623	OG1	THR	1422	-0.711	-11.042	65.685	1.00	35.73
ATOM	9624	CG2	THR	1422	-0.045	-10.961	63.372	1.00	31.21
ATOM	9625	C	THR	1422	2.055	-10.658	66.552	1.00	35.46
ATOM	9626	O	THR	1422	1.761	-11.245	67.594	1.00	33.19
ATOM	9627	N	GLY	1423	2.716	-9.503	66.502	1.00	38.12
ATOM	9628	CA	GLY	1423	3.187	-8.802	67.682	1.00	42.38
ATOM	9629	C	GLY	1423	2.958	-9.491	69.005	1.00	44.65
ATOM	9630	O	GLY	1423	3.540	-10.541	69.273	1.00	47.25
ATOM	9631	N	GLY	1424	2.113	-8.894	69.838	1.00	45.54
ATOM	9632	CA	GLY	1424	1.826	-9.478	71.133	1.00	46.73
ATOM	9633	C	GLY	1424	0.367	-9.366	71.525	1.00	47.44
ATOM	9634	O	GLY	1424	-0.242	-10.347	71.953	1.00	48.03
ATOM	9635	N	HIS	1425	-0.202	-8.174	71.378	1.00	47.09
ATOM	9636	CA	HIS	1425	-1.597	-7.968	71.745	1.00	48.66
ATOM	9637	CB	HIS	1425	-1.732	-6.705	72.598	1.00	50.45
ATOM	9638	CG	HIS	1425	-2.977	-6.666	73.427	1.00	52.26
ATOM	9639	CD2	HIS	1425	-3.834	-5.654	73.701	1.00	53.70
ATOM	9640	ND1	HIS	1425	-3.434	-7.756	74.136	1.00	53.03
ATOM	9641	CE1	HIS	1425	-4.518	-7.418	74.812	1.00	52.99
ATOM	9642	NE2	HIS	1425	-4.781	-6.148	74.566	1.00	54.24
ATOM	9643	C	HIS	1425	-2.485	-7.868	70.511	1.00	47.46
ATOM	9644	O	HIS	1425	-2.627	-6.802	69.917	1.00	46.90
ATOM	9645	N	ILE	1426	-3.078	-8.993	70.129	1.00	47.14
ATOM	9646	CA	ILE	1426	-3.942	-9.039	68.960	1.00	46.99
ATOM	9647	CB	ILE	1426	-4.374	-10.485	68.648	1.00	47.44
ATOM	9648	CG2	ILE	1426	-3.160	-11.313	68.259	1.00	49.26
ATOM	9649	CG1	ILE	1426	-5.069	-11.098	69.860	1.00	47.01
ATOM	9650	CD1	ILE	1426	-5.604	-12.486	69.606	1.00	47.10
ATOM	9651	C	ILE	1426	-5.184	-8.177	69.148	1.00	45.31
ATOM	9652	O	ILE	1426	-5.532	-7.801	70.271	1.00	45.25
ATOM	9653	N	PRO	1427	-5.868	-7.844	68.043	1.00	44.13

ATOM	9654	CD	PRO	1427	-5.581	-8.236	66.652	1.00	43.74
ATOM	9655	CA	PRO	1427	-7.078	-7.020	68.112	1.00	42.56
ATOM	9656	CB	PRO	1427	-7.414	-6.784	66.642	1.00	42.85
ATOM	9657	CG	PRO	1427	-6.925	-8.038	65.989	1.00	44.37
ATOM	9658	C	PRO	1427	-8.212	-7.703	68.870	1.00	40.69
ATOM	9659	O	PRO	1427	-8.274	-8.928	68.941	1.00	39.71
ATOM	9660	N	LYS	1428	-9.105	-6.899	69.436	1.00	39.55
ATOM	9661	CA	LYS	1428	-10.238	-7.422	70.189	1.00	38.02
ATOM	9662	CB	LYS	1428	-11.155	-6.274	70.631	1.00	40.74
ATOM	9663	CG	LYS	1428	-10.693	-5.483	71.860	1.00	44.43
ATOM	9664	CD	LYS	1428	-9.402	-4.698	71.629	1.00	46.69
ATOM	9665	CE	LYS	1428	-8.168	-5.494	72.046	1.00	47.27
ATOM	9666	NZ	LYS	1428	-6.917	-4.715	71.829	1.00	48.13
ATOM	9667	C	LYS	1428	-11.065	-8.451	69.418	1.00	35.07
ATOM	9668	O	LYS	1428	-11.557	-9.417	69.999	1.00	33.86
ATOM	9669	N	PHE	1429	-11.213	-8.250	68.112	1.00	32.23
ATOM	9670	CA	PHE	1429	-12.014	-9.159	67.293	1.00	28.78
ATOM	9671	CB	PHE	1429	-12.484	-8.430	66.027	1.00	27.62
ATOM	9672	CG	PHE	1429	-11.366	-7.984	65.131	1.00	24.25
ATOM	9673	CD1	PHE	1429	-10.713	-8.895	64.304	1.00	23.47
ATOM	9674	CD2	PHE	1429	-10.962	-6.654	65.116	1.00	22.84
ATOM	9675	CE1	PHE	1429	-9.673	-8.489	63.476	1.00	21.56
ATOM	9676	CE2	PHE	1429	-9.922	-6.237	64.293	1.00	23.95
ATOM	9677	CZ	PHE	1429	-9.276	-7.156	63.469	1.00	24.89
ATOM	9678	C	PHE	1429	-11.314	-10.463	66.914	1.00	28.44
ATOM	9679	O	PHE	1429	-11.952	-11.388	66.424	1.00	26.30
ATOM	9680	N	ALA	1430	-10.008	-10.534	67.149	1.00	28.50
ATOM	9681	CA	ALA	1430	-9.236	-11.726	66.816	1.00	29.62
ATOM	9682	CB	ALA	1430	-7.854	-11.325	66.325	1.00	29.24
ATOM	9683	C	ALA	1430	-9.106	-12.685	67.998	1.00	31.64
ATOM	9684	O	ALA	1430	-9.332	-12.311	69.150	1.00	31.63
ATOM	9685	N	LYS	1431	-8.741	-13.927	67.695	1.00	31.81
ATOM	9686	CA	LYS	1431	-8.561	-14.949	68.712	1.00	32.80
ATOM	9687	CB	LYS	1431	-9.847	-15.759	68.891	1.00	33.38
ATOM	9688	CG	LYS	1431	-9.731	-16.878	69.916	1.00	35.77
ATOM	9689	CD	LYS	1431	-11.042	-17.633	70.055	1.00	36.57
ATOM	9690	CE	LYS	1431	-10.902	-18.805	70.998	1.00	37.40
ATOM	9691	NZ	LYS	1431	-12.189	-19.531	71.174	1.00	38.32
ATOM	9692	C	LYS	1431	-7.420	-15.886	68.331	1.00	33.12
ATOM	9693	O	LYS	1431	-7.379	-16.414	67.213	1.00	32.77
ATOM	9694	N	ASN	1432	-6.496	-16.085	69.266	1.00	31.72
ATOM	9695	CA	ASN	1432	-5.350	-16.962	69.054	1.00	30.83
ATOM	9696	CB	ASN	1432	-4.260	-16.655	70.087	1.00	29.88
ATOM	9697	CG	ASN	1432	-2.995	-17.463	69.860	1.00	28.49
ATOM	9698	OD1	ASN	1432	-3.046	-18.600	69.378	1.00	27.87
ATOM	9699	ND2	ASN	1432	-1.856	-16.889	70.223	1.00	26.41
ATOM	9700	C	ASN	1432	-5.814	-18.403	69.225	1.00	30.31
ATOM	9701	O	ASN	1432	-5.917	-18.893	70.347	1.00	32.09
ATOM	9702	N	PHE	1433	-6.095	-19.078	68.115	1.00	30.31
ATOM	9703	CA	PHE	1433	-6.553	-20.463	68.164	1.00	30.25
ATOM	9704	CB	PHE	1433	-7.293	-20.840	66.878	1.00	31.29
ATOM	9705	CG	PHE	1433	-8.609	-20.144	66.706	1.00	32.82
ATOM	9706	CD1	PHE	1433	-8.682	-18.899	66.095	1.00	32.79
ATOM	9707	CD2	PHE	1433	-9.781	-20.737	67.160	1.00	33.56
ATOM	9708	CE1	PHE	1433	-9.907	-18.254	65.936	1.00	34.13
ATOM	9709	CE2	PHE	1433	-11.007	-20.102	67.007	1.00	34.37
ATOM	9710	CZ	PHE	1433	-11.072	-18.858	66.394	1.00	34.19
ATOM	9711	C	PHE	1433	-5.415	-21.449	68.383	1.00	30.90
ATOM	9712	O	PHE	1433	-5.652	-22.634	68.616	1.00	30.90
ATOM	9713	N	LEU	1434	-4.179	-20.969	68.293	1.00	31.92
ATOM	9714	CA	LEU	1434	-3.034	-21.847	68.501	1.00	33.45
ATOM	9715	CB	LEU	1434	-1.783	-21.276	67.834	1.00	30.12
ATOM	9716	CG	LEU	1434	-0.507	-22.124	67.974	1.00	28.48
ATOM	9717	CD1	LEU	1434	-0.732	-23.515	67.385	1.00	24.04
ATOM	9718	CD2	LEU	1434	0.646	-21.422	67.263	1.00	29.29
ATOM	9719	C	LEU	1434	-2.792	-22.008	69.997	1.00	35.53
ATOM	9720	O	LEU	1434	-2.528	-23.209	70.472	1.00	35.29
ATOM	9721	N	ALA	1435	-2.890	-20.903	70.731	1.00	39.10
ATOM	9722	CA	ALA	1435	-2.685	-20.916	72.175	1.00	43.53
ATOM	9723	CB	ALA	1435	-2.849	-19.512	72.741	1.00	43.69
ATOM	9724	C	ALA	1435	-3.675	-21.864	72.833	1.00	46.59
ATOM	9725	O	ALA	1435	-3.376	-22.480	73.857	1.00	48.64
ATOM	9726	N	GLU	1436	-4.857	-21.974	72.235	1.00	49.35
ATOM	9727	CA	GLU	1436	-5.908	-22.852	72.742	1.00	52.29
ATOM	9728	CB	GLU	1436	-7.250	-22.507	72.085	1.00	54.27
ATOM	9729	CG	GLU	1436	-7.670	-21.046	72.213	1.00	57.48
ATOM	9730	CD	GLU	1436	-8.111	-20.674	73.617	1.00	59.19

ATOM	9731	OE1	GLU	1436	-7.296	-20.800	74.557	1.00	60.49
ATOM	9732	OE2	GLU	1436	-9.278	-20.251	73.779	1.00	59.69
ATOM	9733	C	GLU	1436	-5.549	-24.300	72.423	1.00	52.82
ATOM	9734	O	GLU	1436	-6.359	-25.208	72.610	1.00	53.16
ATOM	9735	N	THR	1437	-4.334	-24.504	71.926	1.00	53.46
ATOM	9736	CA	THR	1437	-3.855	-25.839	71.582	1.00	53.71
ATOM	9737	CB	THR	1437	-4.497	-26.343	70.268	1.00	54.29
ATOM	9738	OG1	THR	1437	-4.009	-27.658	69.968	1.00	55.02
ATOM	9739	CG2	THR	1437	-4.167	-25.405	69.113	1.00	55.13
ATOM	9740	C	THR	1437	-2.332	-25.849	71.440	1.00	53.32
ATOM	9741	O	THR	1437	-1.632	-25.088	72.113	1.00	53.43
ATOM	9742	N	GLY	1438	-1.822	-26.716	70.571	1.00	51.53
ATOM	9743	CA	GLY	1438	-0.387	-26.798	70.367	1.00	49.87
ATOM	9744	C	GLY	1438	-0.031	-27.262	68.970	1.00	48.04
ATOM	9745	O	GLY	1438	1.117	-27.603	68.690	1.00	48.97
ATOM	9746	N	ASP	1439	-1.023	-27.265	68.088	1.00	45.31
ATOM	9747	CA	ASP	1439	-0.826	-27.699	66.714	1.00	42.62
ATOM	9748	CB	ASP	1439	-1.358	-29.129	66.553	1.00	44.51
ATOM	9749	CG	ASP	1439	-1.261	-29.633	65.132	1.00	46.55
ATOM	9750	OD1	ASP	1439	-2.119	-29.256	64.309	1.00	47.77
ATOM	9751	OD2	ASP	1439	-0.319	-30.402	64.836	1.00	48.59
ATOM	9752	C	ASP	1439	-1.540	-26.747	65.758	1.00	39.71
ATOM	9753	O	ASP	1439	-2.752	-26.552	65.850	1.00	38.19
ATOM	9754	N	ILE	1440	-0.779	-26.150	64.845	1.00	37.29
ATOM	9755	CA	ILE	1440	-1.337	-25.206	63.883	1.00	34.57
ATOM	9756	CB	ILE	1440	-0.268	-24.751	62.861	1.00	33.52
ATOM	9757	CG2	ILE	1440	-0.920	-23.930	61.748	1.00	33.39
ATOM	9758	CG1	ILE	1440	0.800	-23.920	63.572	1.00	32.81
ATOM	9759	CD1	ILE	1440	1.930	-23.460	62.678	1.00	31.48
ATOM	9760	C	ILE	1440	-2.540	-25.774	63.138	1.00	32.97
ATOM	9761	O	ILE	1440	-3.558	-25.097	62.994	1.00	32.77
ATOM	9762	N	ARG	1441	-2.429	-27.012	62.668	1.00	31.92
ATOM	9763	CA	ARG	1441	-3.532	-27.631	61.947	1.00	30.40
ATOM	9764	CB	ARG	1441	-3.114	-28.993	61.389	1.00	30.10
ATOM	9765	CG	ARG	1441	-2.154	-28.897	60.205	1.00	31.94
ATOM	9766	CD	ARG	1441	-1.662	-30.266	59.761	1.00	31.51
ATOM	9767	NE	ARG	1441	-0.801	-30.192	58.580	1.00	31.83
ATOM	9768	CZ	ARG	1441	0.381	-29.583	58.542	1.00	31.78
ATOM	9769	NH1	ARG	1441	0.863	-28.986	59.624	1.00	31.49
ATOM	9770	NH2	ARG	1441	1.086	-29.571	57.418	1.00	31.50
ATOM	9771	C	ARG	1441	-4.730	-27.776	62.869	1.00	30.29
ATOM	9772	O	ARG	1441	-5.881	-27.702	62.432	1.00	30.16
ATOM	9773	N	ALA	1442	-4.459	-27.979	64.155	1.00	29.42
ATOM	9774	CA	ALA	1442	-5.527	-28.115	65.133	1.00	28.31
ATOM	9775	CB	ALA	1442	-4.963	-28.620	66.469	1.00	27.62
ATOM	9776	C	ALA	1442	-6.183	-26.751	65.308	1.00	26.62
ATOM	9777	O	ALA	1442	-7.396	-26.656	65.471	1.00	28.00
ATOM	9778	N	ALA	1443	-5.377	-25.694	65.270	1.00	24.98
ATOM	9779	CA	ALA	1443	-5.903	-24.343	65.411	1.00	24.60
ATOM	9780	CB	ALA	1443	-4.759	-23.330	65.421	1.00	24.64
ATOM	9781	C	ALA	1443	-6.871	-24.043	64.264	1.00	24.55
ATOM	9782	O	ALA	1443	-7.889	-23.373	64.458	1.00	24.61
ATOM	9783	N	VAL	1444	-6.553	-24.547	63.072	1.00	24.06
ATOM	9784	CA	VAL	1444	-7.396	-24.344	61.895	1.00	25.36
ATOM	9785	CB	VAL	1444	-6.738	-24.933	60.620	1.00	25.58
ATOM	9786	CG1	VAL	1444	-7.681	-24.782	59.430	1.00	26.78
ATOM	9787	CG2	VAL	1444	-5.423	-24.217	60.338	1.00	24.41
ATOM	9788	C	VAL	1444	-8.757	-25.002	62.086	1.00	26.13
ATOM	9789	O	VAL	1444	-9.792	-24.378	61.854	1.00	25.38
ATOM	9790	N	ARG	1445	-8.749	-26.262	62.509	1.00	27.76
ATOM	9791	CA	ARG	1445	-9.988	-27.001	62.723	1.00	29.79
ATOM	9792	CB	ARG	1445	-9.688	-28.459	63.088	1.00	30.48
ATOM	9793	CG	ARG	1445	-9.065	-29.272	61.953	1.00	31.74
ATOM	9794	CD	ARG	1445	-9.068	-30.766	62.259	1.00	33.04
ATOM	9795	NE	ARG	1445	-8.249	-31.106	63.424	1.00	34.02
ATOM	9796	CZ	ARG	1445	-6.941	-31.341	63.383	1.00	33.14
ATOM	9797	NH1	ARG	1445	-6.286	-31.278	62.231	1.00	31.44
ATOM	9798	NH2	ARG	1445	-6.288	-31.650	64.495	1.00	33.53
ATOM	9799	C	ARG	1445	-10.846	-26.361	63.809	1.00	30.41
ATOM	9800	O	ARG	1445	-12.070	-26.298	63.685	1.00	29.87
ATOM	9801	N	GLN	1446	-10.205	-25.877	64.868	1.00	31.30
ATOM	9802	CA	GLN	1446	-10.937	-25.246	65.958	1.00	32.71
ATOM	9803	CB	GLN	1446	-9.987	-24.877	67.098	1.00	35.17
ATOM	9804	CG	GLN	1446	-10.699	-24.629	68.420	1.00	39.56
ATOM	9805	CD	GLN	1446	-9.759	-24.160	69.514	1.00	41.33
ATOM	9806	OE1	GLN	1446	-8.609	-24.608	69.599	1.00	42.46
ATOM	9807	NE2	GLN	1446	-10.247	-23.262	70.371	1.00	40.91

ATOM	9808	C	GLN	1446	-11.632	-23.988	65.440	1.00	31.61
ATOM	9809	O	GLN	1446	-12.792	-23.729	65.755	1.00	30.44
ATOM	9810	N	TYR	1447	-10.907	-23.211	64.643	1.00	31.24
ATOM	9811	CA	TYR	1447	-11.444	-21.981	64.072	1.00	30.17
ATOM	9812	CB	TYR	1447	-10.361	-21.286	63.242	1.00	29.43
ATOM	9813	CG	TYR	1447	-10.865	-20.155	62.374	1.00	28.31
ATOM	9814	CD1	TYR	1447	-11.525	-19.059	62.927	1.00	27.71
ATOM	9815	CE1	TYR	1447	-11.999	-18.023	62.122	1.00	25.98
ATOM	9816	CD2	TYR	1447	-10.689	-20.190	60.990	1.00	28.41
ATOM	9817	CE2	TYR	1447	-11.158	-19.164	60.179	1.00	26.24
ATOM	9818	CZ	TYR	1447	-11.810	-18.087	60.748	1.00	27.37
ATOM	9819	OH	TYR	1447	-12.279	-17.083	59.939	1.00	26.55
ATOM	9820	C	TYR	1447	-12.679	-22.267	63.213	1.00	29.65
ATOM	9821	O	TYR	1447	-13.685	-21.559	63.301	1.00	30.55
ATOM	9822	N	MET	1448	-12.598	-23.309	62.392	1.00	29.56
ATOM	9823	CA	MET	1448	-13.703	-23.702	61.521	1.00	30.34
ATOM	9824	CB	MET	1448	-13.282	-24.878	60.631	1.00	30.01
ATOM	9825	CG	MET	1448	-12.224	-24.529	59.580	1.00	31.10
ATOM	9826	SD	MET	1448	-11.474	-25.991	58.818	1.00	31.68
ATOM	9827	CE	MET	1448	-12.791	-26.527	57.742	1.00	29.90
ATOM	9828	C	MET	1448	-14.935	-24.103	62.327	1.00	30.96
ATOM	9829	O	MET	1448	-16.045	-23.636	62.061	1.00	29.66
ATOM	9830	N	ALA	1449	-14.729	-24.976	63.308	1.00	31.49
ATOM	9831	CA	ALA	1449	-15.814	-25.467	64.152	1.00	32.03
ATOM	9832	CB	ALA	1449	-15.293	-26.567	65.076	1.00	32.34
ATOM	9833	C	ALA	1449	-16.485	-24.369	64.974	1.00	32.12
ATOM	9834	O	ALA	1449	-17.708	-24.350	65.108	1.00	33.68
ATOM	9835	N	GLU	1450	-15.692	-23.460	65.529	1.00	32.10
ATOM	9836	CA	GLU	1450	-16.253	-22.382	66.335	1.00	33.21
ATOM	9837	CB	GLU	1450	-15.154	-21.685	67.141	1.00	34.06
ATOM	9838	CG	GLU	1450	-14.691	-22.482	68.353	1.00	36.22
ATOM	9839	CD	GLU	1450	-13.733	-21.708	69.231	1.00	38.09
ATOM	9840	OE1	GLU	1450	-14.030	-20.539	69.549	1.00	40.42
ATOM	9841	OE2	GLU	1450	-12.685	-22.269	69.615	1.00	41.16
ATOM	9842	C	GLU	1450	-17.023	-21.359	65.508	1.00	32.93
ATOM	9843	O	GLU	1450	-17.956	-20.731	66.010	1.00	31.71
ATOM	9844	N	VAL	1451	-16.636	-21.186	64.246	1.00	31.86
ATOM	9845	CA	VAL	1451	-17.330	-20.241	63.373	1.00	31.03
ATOM	9846	CB	VAL	1451	-16.534	-19.983	62.064	1.00	30.01
ATOM	9847	CG1	VAL	1451	-17.419	-19.275	61.041	1.00	29.75
ATOM	9848	CG2	VAL	1451	-15.312	-19.133	62.367	1.00	28.24
ATOM	9849	C	VAL	1451	-18.713	-20.783	63.017	1.00	31.90
ATOM	9850	O	VAL	1451	-19.705	-20.060	63.094	1.00	32.23
ATOM	9851	N	GLU	1452	-18.766	-22.059	62.639	1.00	31.88
ATOM	9852	CA	GLU	1452	-20.019	-22.704	62.262	1.00	33.73
ATOM	9853	CB	GLU	1452	-19.741	-24.083	61.660	1.00	34.97
ATOM	9854	CG	GLU	1452	-20.993	-24.838	61.243	1.00	38.84
ATOM	9855	CD	GLU	1452	-20.681	-26.118	60.490	1.00	41.04
ATOM	9856	OE1	GLU	1452	-21.632	-26.820	60.088	1.00	42.35
ATOM	9857	OE2	GLU	1452	-19.483	-26.421	60.296	1.00	43.66
ATOM	9858	C	GLU	1452	-20.975	-22.846	63.444	1.00	34.26
ATOM	9859	O	GLU	1452	-22.194	-22.815	63.274	1.00	33.56
ATOM	9860	N	SER	1453	-20.412	-22.996	64.638	1.00	34.47
ATOM	9861	CA	SER	1453	-21.207	-23.145	65.850	1.00	35.91
ATOM	9862	CB	SER	1453	-20.414	-23.918	66.903	1.00	36.48
ATOM	9863	OG	SER	1453	-20.068	-25.205	66.416	1.00	39.52
ATOM	9864	C	SER	1453	-21.608	-21.786	66.414	1.00	35.30
ATOM	9865	O	SER	1453	-22.490	-21.690	67.269	1.00	35.49
ATOM	9866	N	GLY	1454	-20.959	-20.737	65.929	1.00	33.14
ATOM	9867	CA	GLY	1454	-21.267	-19.405	66.407	1.00	32.40
ATOM	9868	C	GLY	1454	-20.441	-19.042	67.624	1.00	31.91
ATOM	9869	O	GLY	1454	-20.491	-17.906	68.100	1.00	31.65
ATOM	9870	N	VAL	1455	-19.680	-20.008	68.132	1.00	32.10
ATOM	9871	CA	VAL	1455	-18.828	-19.781	69.298	1.00	31.24
ATOM	9872	CB	VAL	1455	-17.930	-21.009	69.580	1.00	32.35
ATOM	9873	CG1	VAL	1455	-17.034	-20.735	70.777	1.00	32.27
ATOM	9874	CG2	VAL	1455	-18.787	-22.241	69.820	1.00	33.67
ATOM	9875	C	VAL	1455	-17.939	-18.570	69.033	1.00	30.78
ATOM	9876	O	VAL	1455	-17.739	-17.722	69.905	1.00	30.55
ATOM	9877	N	TYR	1456	-17.410	-18.500	67.815	1.00	28.80
ATOM	9878	CA	TYR	1456	-16.545	-17.401	67.405	1.00	27.94
ATOM	9879	CB	TYR	1456	-15.157	-17.935	67.012	1.00	26.12
ATOM	9880	CG	TYR	1456	-14.226	-16.846	66.531	1.00	23.34
ATOM	9881	CD1	TYR	1456	-13.651	-15.950	67.433	1.00	22.92
ATOM	9882	CE1	TYR	1456	-12.873	-14.883	66.995	1.00	22.74
ATOM	9883	CD2	TYR	1456	-13.989	-16.652	65.169	1.00	24.91
ATOM	9884	CE2	TYR	1456	-13.212	-15.585	64.718	1.00	22.93

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ATOM   9885  CZ   TYR  1456   -12.663 -14.704  65.634  1.00 23.92
ATOM   9886  OH   TYR  1456   -11.936 -13.618  65.204  1.00 24.81
ATOM   9887  C    TYR  1456   -17.155 -16.671  66.208  1.00 27.24
ATOM   9888  O    TYR  1456   -17.610 -17.308  65.259  1.00 27.22
ATOM   9889  N    PRO  1457   -17.178 -15.328  66.242  1.00 28.94
ATOM   9890  CD   PRO  1457   -17.470 -14.508  65.053  1.00 28.55
ATOM   9891  CA   PRO  1457   -16.660 -14.494  67.331  1.00 29.57
ATOM   9892  CB   PRO  1457   -16.370 -13.167  66.638  1.00 29.55
ATOM   9893  CG   PRO  1457   -17.442 -13.105  65.607  1.00 31.60
ATOM   9894  C    PRO  1457   -17.634 -14.338  68.499  1.00 31.24
ATOM   9895  O    PRO  1457   -18.850 -14.454  68.333  1.00 31.53
ATOM   9896  N    GLY  1458   -17.085 -14.081  69.683  1.00 32.29
ATOM   9897  CA   GLY  1458   -17.911 -13.903  70.864  1.00 33.07
ATOM   9898  C    GLY  1458   -18.126 -12.429  71.129  1.00 34.59
ATOM   9899  O    GLY  1458   -17.564 -11.583  70.431  1.00 34.41
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ATOM   9901  CA   GLU  1459   -19.191 -10.711  72.447  1.00 35.57
ATOM   9902  CB   GLU  1459   -20.174 -10.591  73.616  1.00 39.24
ATOM   9903  CG   GLU  1459   -21.239  -9.530  73.394  1.00 41.27
ATOM   9904  CD   GLU  1459   -22.226  -9.926  72.309  1.00 42.55
ATOM   9905  OE1  GLU  1459   -22.962  -9.046  71.815  1.00 43.59
ATOM   9906  OE2  GLU  1459   -22.272 -11.123  71.954  1.00 44.59
ATOM   9907  C    GLU  1459   -17.886 -10.004  72.798  1.00 34.39
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ATOM   9910  CA   GLU  1460   -15.607 -10.232  73.645  1.00 34.54
ATOM   9911  CB   GLU  1460   -14.784 -11.277  74.404  1.00 37.12
ATOM   9912  CG   GLU  1460   -15.592 -12.160  75.331  1.00 41.64
ATOM   9913  CD   GLU  1460   -16.379 -13.213  74.579  1.00 43.05
ATOM   9914  OE1  GLU  1460   -15.745 -14.100  73.961  1.00 43.71
ATOM   9915  OE2  GLU  1460   -17.628 -13.148  74.600  1.00 44.97
ATOM   9916  C    GLU  1460   -14.828  -9.816  72.404  1.00 33.32
ATOM   9917  O    GLU  1460   -13.883  -9.031  72.488  1.00 33.42
ATOM   9918  N    HIS  1461   -15.227 -10.358  71.258  1.00 31.67
ATOM   9919  CA   HIS  1461   -14.571 -10.067  69.986  1.00 30.54
ATOM   9920  CB   HIS  1461   -14.304 -11.368  69.224  1.00 30.83
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ATOM   9922  CD2  HIS  1461   -13.853 -13.630  70.415  1.00 30.87
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ATOM   9926  C    HIS  1461   -15.443  -9.169  69.121  1.00 30.10
ATOM   9927  O    HIS  1461   -15.096  -8.871  67.979  1.00 28.36
ATOM   9928  N    SER  1462   -16.573  -8.742  69.677  1.00 29.88
ATOM   9929  CA   SER  1462   -17.526  -7.901  68.962  1.00 31.52
ATOM   9930  CB   SER  1462   -18.930  -8.484  69.111  1.00 29.18
ATOM   9931  OG   SER  1462   -18.956  -9.846  68.726  1.00 31.95
ATOM   9932  C    SER  1462   -17.538  -6.453  69.440  1.00 33.19
ATOM   9933  O    SER  1462   -17.161  -6.161  70.576  1.00 33.68
ATOM   9934  N    PHE  1463   -17.981  -5.550  68.567  1.00 33.32
ATOM   9935  CA   PHE  1463   -18.057  -4.130  68.900  1.00 34.66
ATOM   9936  CB   PHE  1463   -17.364  -3.274  67.834  1.00 35.23
ATOM   9937  CG   PHE  1463   -15.895  -3.555  67.684  1.00 36.25
ATOM   9938  CD1  PHE  1463   -15.453  -4.650  66.951  1.00 36.98
ATOM   9939  CD2  PHE  1463   -14.952  -2.721  68.278  1.00 37.01
ATOM   9940  CE1  PHE  1463   -14.092  -4.910  66.807  1.00 37.76
ATOM   9941  CE2  PHE  1463   -13.587  -2.971  68.142  1.00 35.48
ATOM   9942  CZ   PHE  1463   -13.157  -4.068  67.405  1.00 37.03
ATOM   9943  C    PHE  1463   -19.513  -3.685  69.027  1.00 35.85
ATOM   9944  O    PHE  1463   -20.420  -4.319  68.486  1.00 33.90
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ATOM   9946  CA   HIS  1464   -21.068  -2.053  69.949  1.00 39.80
ATOM   9947  CB   HIS  1464   -21.623  -2.538  71.289  1.00 39.63
ATOM   9948  CG   HIS  1464   -21.853  -4.016  71.342  1.00 40.65
ATOM   9949  CD2  HIS  1464   -21.226  -4.995  72.038  1.00 40.98
ATOM   9950  ND1  HIS  1464   -22.818  -4.644  70.585  1.00 39.94
ATOM   9951  CE1  HIS  1464   -22.776  -5.945  70.810  1.00 40.36
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ATOM   9953  C    HIS  1464   -21.042  -0.535  69.920  1.00 40.95
ATOM   9954  O    HIS  1464   -21.911   0.059  69.243  1.00 41.98
ATOM   9955  OXT  HIS  1464   -20.156   0.038  70.583  1.00 42.55
ATOM   9956  C1   KPL  1465    -8.662  -8.598  56.997  1.00 40.66
ATOM   9957  C2   KPL  1465    -9.406  -8.731  55.651  1.00 40.02
ATOM   9958  C3   KPL  1465    -9.470 -10.212  55.264  1.00 40.28
ATOM   9959  C4   KPL  1465   -10.847  -8.205  55.810  1.00 41.40
ATOM   9960  O1   KPL  1465   -10.844  -6.822  56.181  1.00 43.78
ATOM   9961  C5   KPL  1465    -8.646  -7.947  54.549  1.00 38.37
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ATOM	9962	O2	KPL	1465	-9.203	-7.052	53.945	1.00	39.08
ATOM	9963	C6	KPL	1465	-7.208	-8.268	54.193	1.00	36.59
ATOM	9964	O3	KPL	1465	-6.611	-9.157	54.768	1.00	34.92
ATOM	9965	O4	KPL	1465	-6.578	-7.561	53.231	1.00	31.35
ATOM	9966	CB	MET	1501	12.451	-25.585	-6.577	1.00	68.45
ATOM	9967	CG	MET	1501	12.983	-25.086	-7.922	1.00	70.78
ATOM	9968	SD	MET	1501	14.555	-25.814	-8.446	1.00	73.21
ATOM	9969	CE	MET	1501	15.640	-24.379	-8.381	1.00	72.59
ATOM	9970	C	MET	1501	14.232	-26.660	-5.175	1.00	64.43
ATOM	9971	O	MET	1501	13.933	-27.714	-5.740	1.00	64.33
ATOM	9972	N	MET	1501	14.252	-24.188	-5.606	1.00	67.20
ATOM	9973	CA	MET	1501	13.404	-25.395	-5.390	1.00	66.44
ATOM	9974	N	LYS	1502	15.270	-26.551	-4.351	1.00	61.82
ATOM	9975	CA	LYS	1502	16.137	-27.690	-4.067	1.00	58.51
ATOM	9976	CB	LYS	1502	17.506	-27.493	-4.719	1.00	59.36
ATOM	9977	CG	LYS	1502	17.454	-27.205	-6.219	1.00	59.84
ATOM	9978	CD	LYS	1502	16.747	-28.314	-6.992	1.00	60.21
ATOM	9979	CE	LYS	1502	17.479	-29.641	-6.871	1.00	60.21
ATOM	9980	NZ	LYS	1502	16.766	-30.731	-7.593	1.00	60.90
ATOM	9981	C	LYS	1502	16.286	-27.938	-2.562	1.00	55.49
ATOM	9982	O	LYS	1502	16.023	-29.039	-2.083	1.00	56.98
ATOM	9983	N	PRO	1503	16.733	-26.918	-1.795	1.00	51.21
ATOM	9984	CD	PRO	1503	16.674	-27.002	-0.323	1.00	49.69
ATOM	9985	CA	PRO	1503	17.082	-25.554	-2.213	1.00	46.71
ATOM	9986	CB	PRO	1503	16.764	-24.739	-0.973	1.00	48.28
ATOM	9987	CG	PRO	1503	17.226	-25.653	0.112	1.00	49.41
ATOM	9988	C	PRO	1503	18.558	-25.434	-2.610	1.00	42.37
ATOM	9989	O	PRO	1503	19.337	-26.369	-2.433	1.00	41.84
ATOM	9990	N	THR	1504	18.929	-24.274	-3.142	1.00	37.50
ATOM	9991	CA	THR	1504	20.302	-24.024	-3.565	1.00	33.10
ATOM	9992	CB	THR	1504	20.375	-22.784	-4.485	1.00	32.53
ATOM	9993	OG1	THR	1504	19.578	-23.011	-5.653	1.00	33.15
ATOM	9994	CG2	THR	1504	21.808	-22.502	-4.905	1.00	29.59
ATOM	9995	C	THR	1504	21.190	-23.805	-2.342	1.00	31.99
ATOM	9996	O	THR	1504	20.826	-23.069	-1.425	1.00	29.30
ATOM	9997	N	THR	1505	22.354	-24.446	-2.332	1.00	30.78
ATOM	9998	CA	THR	1505	23.273	-24.324	-1.208	1.00	29.63
ATOM	9999	CB	THR	1505	23.305	-25.619	-0.369	1.00	29.85
ATOM	10000	OG1	THR	1505	23.894	-26.674	-1.138	1.00	31.33
ATOM	10001	CG2	THR	1505	21.899	-26.029	0.036	1.00	29.10
ATOM	10002	C	THR	1505	24.695	-24.014	-1.659	1.00	29.48
ATOM	10003	O	THR	1505	25.006	-24.056	-2.850	1.00	27.82
ATOM	10004	N	ILE	1506	25.557	-23.708	-0.693	1.00	29.78
ATOM	10005	CA	ILE	1506	26.950	-23.391	-0.975	1.00	30.15
ATOM	10006	CB	ILE	1506	27.723	-23.108	0.331	1.00	31.02
ATOM	10007	CG2	ILE	1506	29.122	-22.597	0.013	1.00	30.67
ATOM	10008	CG1	ILE	1506	26.966	-22.065	1.161	1.00	31.55
ATOM	10009	CD1	ILE	1506	27.492	-21.896	2.576	1.00	33.42
ATOM	10010	C	ILE	1506	27.593	-24.568	-1.705	1.00	30.17
ATOM	10011	O	ILE	1506	28.525	-24.394	-2.491	1.00	30.44
ATOM	10012	N	SER	1507	27.077	-25.765	-1.441	1.00	31.25
ATOM	10013	CA	SER	1507	27.576	-26.990	-2.059	1.00	33.43
ATOM	10014	CB	SER	1507	26.707	-28.180	-1.646	1.00	34.53
ATOM	10015	OG	SER	1507	26.578	-28.258	-0.238	1.00	39.65
ATOM	10016	C	SER	1507	27.579	-26.889	-3.580	1.00	33.68
ATOM	10017	O	SER	1507	28.551	-27.269	-4.234	1.00	33.38
ATOM	10018	N	LEU	1508	26.483	-26.383	-4.137	1.00	32.89
ATOM	10019	CA	LEU	1508	26.361	-26.242	-5.582	1.00	32.80
ATOM	10020	CB	LEU	1508	24.970	-25.720	-5.958	1.00	34.32
ATOM	10021	CG	LEU	1508	24.031	-26.678	-6.701	1.00	36.26
ATOM	10022	CD1	LEU	1508	22.694	-25.992	-6.951	1.00	36.00
ATOM	10023	CD2	LEU	1508	24.661	-27.114	-8.009	1.00	36.33
ATOM	10024	C	LEU	1508	27.420	-25.307	-6.156	1.00	31.90
ATOM	10025	O	LEU	1508	28.012	-25.597	-7.196	1.00	32.06
ATOM	10026	N	LEU	1509	27.659	-24.187	-5.482	1.00	29.72
ATOM	10027	CA	LEU	1509	28.646	-23.226	-5.959	1.00	29.54
ATOM	10028	CB	LEU	1509	28.595	-21.946	-5.116	1.00	29.54
ATOM	10029	CG	LEU	1509	27.233	-21.237	-5.105	1.00	29.15
ATOM	10030	CD1	LEU	1509	27.350	-19.898	-4.383	1.00	30.33
ATOM	10031	CD2	LEU	1509	26.748	-21.021	-6.535	1.00	28.87
ATOM	10032	C	LEU	1509	30.044	-23.830	-5.927	1.00	30.18
ATOM	10033	O	LEU	1509	30.875	-23.559	-6.799	1.00	27.72
ATOM	10034	N	GLN	1510	30.294	-24.658	-4.920	1.00	30.60
ATOM	10035	CA	GLN	1510	31.587	-25.308	-4.779	1.00	32.89
ATOM	10036	CB	GLN	1510	31.674	-26.008	-3.419	1.00	32.23
ATOM	10037	CG	GLN	1510	33.059	-26.521	-3.051	1.00	34.03
ATOM	10038	CD	GLN	1510	34.137	-25.452	-3.146	1.00	35.52

ATOM	10039	OE1	GLN	1510	34.673	-25.187	-4.223	1.00	36.22
ATOM	10040	NE2	GLN	1510	34.452	-24.824	-2.017	1.00	34.94
ATOM	10041	C	GLN	1510	31.747	-26.312	-5.920	1.00	33.79
ATOM	10042	O	GLN	1510	32.852	-26.537	-6.408	1.00	34.78
ATOM	10043	N	LYS	1511	30.636	-26.906	-6.345	1.00	35.14
ATOM	10044	CA	LYS	1511	30.659	-27.864	-7.446	1.00	36.98
ATOM	10045	CB	LYS	1511	29.309	-28.574	-7.574	1.00	38.13
ATOM	10046	CG	LYS	1511	29.169	-29.386	-8.859	1.00	40.56
ATOM	10047	CD	LYS	1511	27.711	-29.594	-9.259	1.00	43.87
ATOM	10048	CE	LYS	1511	26.973	-30.517	-8.299	1.00	45.00
ATOM	10049	NZ	LYS	1511	25.536	-30.670	-8.686	1.00	47.90
ATOM	10050	C	LYS	1511	30.955	-27.127	-8.750	1.00	36.69
ATOM	10051	O	LYS	1511	31.694	-27.619	-9.599	1.00	37.22
ATOM	10052	N	TYR	1512	30.371	-25.942	-8.899	1.00	36.54
ATOM	10053	CA	TYR	1512	30.560	-25.141	-10.098	1.00	35.65
ATOM	10054	CB	TYR	1512	29.669	-23.900	-10.053	1.00	37.28
ATOM	10055	CG	TYR	1512	28.193	-24.188	-10.212	1.00	39.20
ATOM	10056	CD1	TYR	1512	27.249	-23.175	-10.051	1.00	41.06
ATOM	10057	CE1	TYR	1512	25.889	-23.429	-10.195	1.00	42.03
ATOM	10058	CD2	TYR	1512	27.739	-25.468	-10.526	1.00	40.61
ATOM	10059	CE2	TYR	1512	26.382	-25.734	-10.673	1.00	41.29
ATOM	10060	CZ	TYR	1512	25.463	-24.710	-10.506	1.00	42.07
ATOM	10061	OH	TYR	1512	24.117	-24.963	-10.646	1.00	43.50
ATOM	10062	C	TYR	1512	32.002	-24.716	-10.328	1.00	36.33
ATOM	10063	O	TYR	1512	32.492	-24.771	-11.457	1.00	34.44
ATOM	10064	N	LYS	1513	32.684	-24.277	-9.274	1.00	35.91
ATOM	10065	CA	LYS	1513	34.074	-23.858	-9.426	1.00	37.24
ATOM	10066	CB	LYS	1513	34.646	-23.362	-8.090	1.00	35.07
ATOM	10067	CG	LYS	1513	36.146	-23.108	-8.136	1.00	32.35
ATOM	10068	CD	LYS	1513	36.594	-22.091	-7.096	1.00	31.84
ATOM	10069	CE	LYS	1513	38.093	-21.848	-7.198	1.00	30.35
ATOM	10070	NZ	LYS	1513	38.524	-20.591	-6.529	1.00	29.60
ATOM	10071	C	LYS	1513	34.907	-25.022	-9.954	1.00	38.69
ATOM	10072	O	LYS	1513	35.870	-24.829	-10.694	1.00	39.24
ATOM	10073	N	GLN	1514	34.517	-26.231	-9.567	1.00	40.67
ATOM	10074	CA	GLN	1514	35.205	-27.437	-9.995	1.00	43.38
ATOM	10075	CB	GLN	1514	34.733	-28.623	-9.160	1.00	45.15
ATOM	10076	CG	GLN	1514	35.177	-28.565	-7.710	1.00	48.35
ATOM	10077	CD	GLN	1514	34.481	-29.604	-6.855	1.00	49.83
ATOM	10078	OE1	GLN	1514	34.101	-30.669	-7.343	1.00	51.33
ATOM	10079	NE2	GLN	1514	34.321	-29.304	-5.570	1.00	50.47
ATOM	10080	C	GLN	1514	34.936	-27.704	-11.470	1.00	43.74
ATOM	10081	O	GLN	1514	35.820	-28.148	-12.200	1.00	44.54
ATOM	10082	N	GLU	1515	33.710	-27.428	-11.902	1.00	43.52
ATOM	10083	CA	GLU	1515	33.329	-27.637	-13.291	1.00	43.19
ATOM	10084	CB	GLU	1515	31.830	-27.920	-13.394	1.00	44.57
ATOM	10085	CG	GLU	1515	31.351	-29.051	-12.502	1.00	46.62
ATOM	10086	CD	GLU	1515	29.909	-29.430	-12.773	1.00	48.59
ATOM	10087	OE1	GLU	1515	29.051	-28.525	-12.825	1.00	48.92
ATOM	10088	OE2	GLU	1515	29.630	-30.637	-12.927	1.00	51.45
ATOM	10089	C	GLU	1515	33.676	-26.417	-14.136	1.00	42.44
ATOM	10090	O	GLU	1515	33.426	-26.396	-15.343	1.00	43.10
ATOM	10091	N	LYS	1516	34.255	-25.405	-13.496	1.00	40.37
ATOM	10092	CA	LYS	1516	34.633	-24.169	-14.175	1.00	39.50
ATOM	10093	CB	LYS	1516	35.645	-24.459	-15.282	1.00	40.90
ATOM	10094	CG	LYS	1516	36.965	-25.031	-14.793	1.00	42.75
ATOM	10095	CD	LYS	1516	37.714	-24.039	-13.919	1.00	45.19
ATOM	10096	CE	LYS	1516	39.074	-24.585	-13.498	1.00	46.49
ATOM	10097	NZ	LYS	1516	39.950	-24.871	-14.670	1.00	48.49
ATOM	10098	C	LYS	1516	33.408	-23.475	-14.768	1.00	38.14
ATOM	10099	O	LYS	1516	33.512	-22.731	-15.745	1.00	38.51
ATOM	10100	N	LYS	1517	32.249	-23.727	-14.170	1.00	35.26
ATOM	10101	CA	LYS	1517	31.003	-23.128	-14.630	1.00	33.69
ATOM	10102	CB	LYS	1517	29.837	-24.084	-14.385	1.00	34.32
ATOM	10103	CG	LYS	1517	28.497	-23.587	-14.904	1.00	35.09
ATOM	10104	CD	LYS	1517	27.352	-24.446	-14.384	1.00	37.44
ATOM	10105	CE	LYS	1517	27.483	-25.896	-14.832	1.00	39.19
ATOM	10106	NZ	LYS	1517	26.503	-26.777	-14.131	1.00	41.39
ATOM	10107	C	LYS	1517	30.765	-21.823	-13.878	1.00	31.87
ATOM	10108	O	LYS	1517	30.366	-21.830	-12.715	1.00	31.03
ATOM	10109	N	ARG	1518	31.018	-20.704	-14.546	1.00	30.53
ATOM	10110	CA	ARG	1518	30.826	-19.399	-13.929	1.00	28.43
ATOM	10111	CB	ARG	1518	31.462	-18.319	-14.805	1.00	30.06
ATOM	10112	CG	ARG	1518	32.981	-18.306	-14.714	1.00	31.46
ATOM	10113	CD	ARG	1518	33.626	-17.421	-15.766	1.00	33.23
ATOM	10114	NE	ARG	1518	33.666	-18.071	-17.074	1.00	35.53
ATOM	10115	CZ	ARG	1518	34.192	-17.523	-18.165	1.00	36.48

ATOM	10116	NH1	ARG	1518	34.723	-16.308	-18.113	1.00	34.15
ATOM	10117	NH2	ARG	1518	34.192	-18.194	-19.308	1.00	37.73
ATOM	10118	C	ARG	1518	29.340	-19.127	-13.692	1.00	27.86
ATOM	10119	O	ARG	1518	28.518	-19.234	-14.605	1.00	27.30
ATOM	10120	N	PHE	1519	29.008	-18.776	-12.452	1.00	25.52
ATOM	10121	CA	PHE	1519	27.625	-18.518	-12.056	1.00	23.05
ATOM	10122	CB	PHE	1519	27.283	-19.382	-10.841	1.00	23.24
ATOM	10123	CG	PHE	1519	28.151	-19.109	-9.646	1.00	22.05
ATOM	10124	CD1	PHE	1519	27.829	-18.085	-8.755	1.00	22.20
ATOM	10125	CD2	PHE	1519	29.311	-19.851	-9.428	1.00	24.57
ATOM	10126	CE1	PHE	1519	28.650	-17.800	-7.666	1.00	20.88
ATOM	10127	CE2	PHE	1519	30.142	-19.575	-8.342	1.00	24.45
ATOM	10128	CZ	PHE	1519	29.810	-18.547	-7.457	1.00	23.26
ATOM	10129	C	PHE	1519	27.356	-17.048	-11.738	1.00	23.05
ATOM	10130	O	PHE	1519	28.248	-16.314	-11.310	1.00	21.97
ATOM	10131	N	ALA	1520	26.113	-16.627	-11.944	1.00	21.46
ATOM	10132	CA	ALA	1520	25.718	-15.250	-11.687	1.00	20.80
ATOM	10133	CB	ALA	1520	24.835	-14.747	-12.822	1.00	20.77
ATOM	10134	C	ALA	1520	24.991	-15.098	-10.352	1.00	19.62
ATOM	10135	O	ALA	1520	24.241	-15.980	-9.936	1.00	20.43
ATOM	10136	N	THR	1521	25.230	-13.972	-9.688	1.00	19.21
ATOM	10137	CA	THR	1521	24.602	-13.663	-8.406	1.00	20.28
ATOM	10138	CB	THR	1521	25.626	-13.736	-7.259	1.00	20.78
ATOM	10139	OG1	THR	1521	26.154	-15.070	-7.183	1.00	23.74
ATOM	10140	CG2	THR	1521	24.967	-13.386	-5.934	1.00	27.16
ATOM	10141	C	THR	1521	24.030	-12.250	-8.495	1.00	17.98
ATOM	10142	O	THR	1521	24.485	-11.435	-9.300	1.00	17.51
ATOM	10143	N	ILE	1522	23.042	-11.942	-7.666	1.00	17.55
ATOM	10144	CA	ILE	1522	22.427	-10.626	-7.746	1.00	15.48
ATOM	10145	CB	ILE	1522	21.232	-10.684	-8.726	1.00	15.93
ATOM	10146	CG2	ILE	1522	20.049	-11.381	-8.064	1.00	15.09
ATOM	10147	CG1	ILE	1522	20.846	-9.276	-9.185	1.00	15.40
ATOM	10148	CD1	ILE	1522	21.865	-8.630	-10.104	1.00	21.34
ATOM	10149	C	ILE	1522	21.944	-10.131	-6.386	1.00	15.61
ATOM	10150	O	ILE	1522	21.694	-10.926	-5.485	1.00	13.97
ATOM	10151	N	THR	1523	21.825	-8.818	-6.226	1.00	17.24
ATOM	10152	CA	THR	1523	21.331	-8.289	-4.962	1.00	16.39
ATOM	10153	CB	THR	1523	21.855	-6.859	-4.657	1.00	16.96
ATOM	10154	OG1	THR	1523	21.353	-5.938	-5.628	1.00	18.49
ATOM	10155	CG2	THR	1523	23.385	-6.828	-4.660	1.00	17.93
ATOM	10156	C	THR	1523	19.806	-8.255	-5.065	1.00	15.12
ATOM	10157	O	THR	1523	19.250	-8.196	-6.156	1.00	15.19
ATOM	10158	N	ALA	1524	19.131	-8.323	-3.925	1.00	15.23
ATOM	10159	CA	ALA	1524	17.675	-8.280	-3.889	1.00	12.50
ATOM	10160	CB	ALA	1524	17.092	-9.670	-4.121	1.00	13.98
ATOM	10161	C	ALA	1524	17.296	-7.759	-2.508	1.00	13.20
ATOM	10162	O	ALA	1524	17.943	-8.102	-1.517	1.00	14.00
ATOM	10163	N	TYR	1525	16.244	-6.946	-2.448	1.00	13.12
ATOM	10164	CA	TYR	1525	15.813	-6.346	-1.190	1.00	13.36
ATOM	10165	CB	TYR	1525	16.287	-4.896	-1.112	1.00	12.75
ATOM	10166	CG	TYR	1525	17.633	-4.646	-1.748	1.00	14.96
ATOM	10167	CD1	TYR	1525	17.717	-4.174	-3.056	1.00	16.08
ATOM	10168	CE1	TYR	1525	18.938	-3.904	-3.648	1.00	18.05
ATOM	10169	CD2	TYR	1525	18.820	-4.852	-1.040	1.00	15.12
ATOM	10170	CE2	TYR	1525	20.064	-4.582	-1.627	1.00	14.69
ATOM	10171	CZ	TYR	1525	20.107	-4.107	-2.928	1.00	16.54
ATOM	10172	OH	TYR	1525	21.315	-3.807	-3.521	1.00	17.02
ATOM	10173	C	TYR	1525	14.305	-6.357	-0.977	1.00	13.91
ATOM	10174	O	TYR	1525	13.808	-5.714	-0.053	1.00	12.93
ATOM	10175	N	ASP	1526	13.575	-7.055	-1.839	1.00	12.13
ATOM	10176	CA	ASP	1526	12.129	-7.127	-1.692	1.00	12.96
ATOM	10177	CB	ASP	1526	11.454	-5.901	-2.325	1.00	13.73
ATOM	10178	CG	ASP	1526	11.615	-5.846	-3.835	1.00	17.18
ATOM	10179	OD1	ASP	1526	10.998	-6.672	-4.543	1.00	19.08
ATOM	10180	OD2	ASP	1526	12.363	-4.967	-4.311	1.00	19.29
ATOM	10181	C	ASP	1526	11.574	-8.412	-2.297	1.00	14.23
ATOM	10182	O	ASP	1526	12.250	-9.088	-3.071	1.00	13.08
ATOM	10183	N	TYR	1527	10.343	-8.741	-1.918	1.00	11.93
ATOM	10184	CA	TYR	1527	9.648	-9.941	-2.387	1.00	13.16
ATOM	10185	CB	TYR	1527	8.248	-9.987	-1.778	1.00	14.17
ATOM	10186	CG	TYR	1527	7.338	-11.037	-2.388	1.00	16.24
ATOM	10187	CD1	TYR	1527	7.352	-12.348	-1.925	1.00	16.32
ATOM	10188	CE1	TYR	1527	6.527	-13.320	-2.484	1.00	17.69
ATOM	10189	CD2	TYR	1527	6.468	-10.718	-3.437	1.00	17.45
ATOM	10190	CE2	TYR	1527	5.637	-11.688	-4.007	1.00	17.34
ATOM	10191	CZ	TYR	1527	5.677	-12.987	-3.519	1.00	19.46
ATOM	10192	OH	TYR	1527	4.875	-13.963	-4.069	1.00	21.07

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ATOM  10193  C    TYR  1527      9.503 -10.052  -3.901  1.00 14.65
ATOM  10194  O    TYR  1527      9.766 -11.102  -4.480  1.00 13.71
ATOM  10195  N    SER  1528      9.057  -8.974  -4.534  1.00 14.41
ATOM  10196  CA   SER  1528      8.825  -9.001  -5.965  1.00 12.84
ATOM  10197  CB   SER  1528      8.203  -7.687  -6.422  1.00 13.95
ATOM  10198  OG   SER  1528      6.922  -7.521  -5.821  1.00 16.83
ATOM  10199  C    SER  1528     10.041  -9.324  -6.809  1.00 13.31
ATOM  10200  O    SER  1528      9.991 -10.229  -7.650  1.00 13.87
ATOM  10201  N    PHE  1529     11.139  -8.609  -6.610  1.00 13.52
ATOM  10202  CA   PHE  1529     12.315  -8.926  -7.410  1.00 14.35
ATOM  10203  CB   PHE  1529     13.359  -7.817  -7.299  1.00 12.92
ATOM  10204  CG   PHE  1529     13.092  -6.664  -8.215  1.00 16.39
ATOM  10205  CD1  PHE  1529     12.474  -5.511  -7.747  1.00 15.02
ATOM  10206  CD2  PHE  1529     13.443  -6.743  -9.560  1.00 15.32
ATOM  10207  CE1  PHE  1529     12.207  -4.440  -8.609  1.00 17.64
ATOM  10208  CE2  PHE  1529     13.183  -5.685 -10.432  1.00 16.87
ATOM  10209  CZ   PHE  1529     12.564  -4.529  -9.959  1.00 17.73
ATOM  10210  C    PHE  1529     12.909 -10.279  -7.038  1.00 13.50
ATOM  10211  O    PHE  1529     13.384 -11.010  -7.908  1.00 14.17
ATOM  10212  N    ALA  1530     12.865 -10.628  -5.757  1.00 13.05
ATOM  10213  CA   ALA  1530     13.395 -11.925  -5.337  1.00 13.28
ATOM  10214  CB   ALA  1530     13.261 -12.083  -3.819  1.00 11.40
ATOM  10215  C    ALA  1530     12.640 -13.050  -6.050  1.00 13.09
ATOM  10216  O    ALA  1530     13.242 -14.003  -6.546  1.00 14.85
ATOM  10217  N    LYS  1531     11.315 -12.931  -6.087  1.00 13.26
ATOM  10218  CA   LYS  1531     10.458 -13.928  -6.728  1.00 14.54
ATOM  10219  CB   LYS  1531      8.991 -13.535  -6.523  1.00 15.21
ATOM  10220  CG   LYS  1531      7.959 -14.425  -7.195  1.00 19.57
ATOM  10221  CD   LYS  1531      7.576 -15.623  -6.363  1.00 24.21
ATOM  10222  CE   LYS  1531      6.196 -16.116  -6.781  1.00 25.02
ATOM  10223  NZ   LYS  1531      6.169 -16.393  -8.238  1.00 27.58
ATOM  10224  C    LYS  1531     10.773 -14.020  -8.221  1.00 13.65
ATOM  10225  O    LYS  1531     10.854 -15.114  -8.783  1.00 13.38
ATOM  10226  N    LEU  1532     10.941 -12.863  -8.853  1.00 15.51
ATOM  10227  CA   LEU  1532     11.238 -12.793 -10.283  1.00 15.37
ATOM  10228  CB   LEU  1532     11.295 -11.326 -10.727  1.00 16.67
ATOM  10229  CG   LEU  1532     11.485 -11.051 -12.233  1.00 13.94
ATOM  10230  CD1  LEU  1532     11.109  -9.614 -12.552  1.00 15.17
ATOM  10231  CD2  LEU  1532     12.937 -11.316 -12.617  1.00 18.81
ATOM  10232  C    LEU  1532     12.555 -13.507 -10.605  1.00 15.94
ATOM  10233  O    LEU  1532     12.612 -14.332 -11.522  1.00 18.14
ATOM  10234  N    PHE  1533     13.604 -13.201  -9.844  1.00 16.77
ATOM  10235  CA   PHE  1533     14.905 -13.825 -10.063  1.00 16.92
ATOM  10236  CB   PHE  1533     15.965 -13.248  -9.106  1.00 16.06
ATOM  10237  CG   PHE  1533     16.169 -11.762  -9.227  1.00 16.65
ATOM  10238  CD1  PHE  1533     15.971 -11.111 -10.440  1.00 18.16
ATOM  10239  CD2  PHE  1533     16.564 -11.011  -8.119  1.00 14.45
ATOM  10240  CE1  PHE  1533     16.157  -9.735 -10.554  1.00 18.81
ATOM  10241  CE2  PHE  1533     16.754  -9.632  -8.225  1.00 16.25
ATOM  10242  CZ   PHE  1533     16.549  -8.991  -9.443  1.00 18.42
ATOM  10243  C    PHE  1533     14.814 -15.337  -9.858  1.00 17.37
ATOM  10244  O    PHE  1533     15.257 -16.112 -10.699  1.00 17.81
ATOM  10245  N    ALA  1534     14.237 -15.743  -8.732  1.00 17.43
ATOM  10246  CA   ALA  1534     14.085 -17.159  -8.417  1.00 19.85
ATOM  10247  CB   ALA  1534     13.370 -17.333  -7.074  1.00 20.47
ATOM  10248  C    ALA  1534     13.316 -17.900  -9.509  1.00 21.04
ATOM  10249  O    ALA  1534     13.616 -19.057  -9.822  1.00 19.42
ATOM  10250  N    ASP  1535     12.318 -17.243 -10.085  1.00 22.15
ATOM  10251  CA   ASP  1535     11.530 -17.879 -11.131  1.00 22.54
ATOM  10252  CB   ASP  1535     10.232 -17.109 -11.387  1.00 24.94
ATOM  10253  CG   ASP  1535      9.228 -17.260 -10.259  1.00 26.10
ATOM  10254  OD1  ASP  1535      9.260 -18.288  -9.553  1.00 29.47
ATOM  10255  OD2  ASP  1535      8.398 -16.352 -10.093  1.00 30.35
ATOM  10256  C    ASP  1535     12.287 -18.042 -12.447  1.00 22.47
ATOM  10257  O    ASP  1535     11.874 -18.823 -13.296  1.00 22.23
ATOM  10258  N    GLU  1536     13.386 -17.311 -12.617  1.00 22.56
ATOM  10259  CA   GLU  1536     14.187 -17.407 -13.838  1.00 23.73
ATOM  10260  CB   GLU  1536     14.678 -16.024 -14.278  1.00 23.59
ATOM  10261  CG   GLU  1536     13.583 -15.086 -14.756  1.00 25.82
ATOM  10262  CD   GLU  1536     12.700 -15.718 -15.814  1.00 26.18
ATOM  10263  OE1  GLU  1536     13.256 -16.349 -16.739  1.00 25.95
ATOM  10264  OE2  GLU  1536     11.459 -15.575 -15.718  1.00 26.71
ATOM  10265  C    GLU  1536     15.397 -18.325 -13.672  1.00 24.75
ATOM  10266  O    GLU  1536     15.973 -18.784 -14.654  1.00 26.28
ATOM  10267  N    GLY  1537     15.797 -18.583 -12.433  1.00 25.87
ATOM  10268  CA   GLY  1537     16.944 -19.447 -12.223  1.00 25.64
ATOM  10269  C    GLY  1537     18.037 -18.855 -11.356  1.00 24.92
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ATOM  10270  O    GLY  1537     18.903 -19.588 -10.893  1.00 26.48
ATOM  10271  N    LEU  1538     18.014 -17.540 -11.148  1.00 23.82
ATOM  10272  CA   LEU  1538     19.010 -16.872 -10.305  1.00 24.22
ATOM  10273  CB   LEU  1538     18.938 -15.356 -10.488  1.00 24.47
ATOM  10274  CG   LEU  1538     20.087 -14.653 -11.205  1.00 26.59
ATOM  10275  CD1  LEU  1538     19.769 -13.170 -11.298  1.00 23.00
ATOM  10276  CD2  LEU  1538     21.403 -14.879 -10.479  1.00 25.88
ATOM  10277  C    LEU  1538     18.682 -17.223  -8.862  1.00 23.54
ATOM  10278  O    LEU  1538     17.831 -16.580  -8.246  1.00 22.67
ATOM  10279  N    ASN  1539     19.372 -18.235  -8.338  1.00 23.14
ATOM  10280  CA   ASN  1539     19.146 -18.740  -6.985  1.00 23.02
ATOM  10281  CB   ASN  1539     19.144 -20.276  -6.991  1.00 25.31
ATOM  10282  CG   ASN  1539     18.057 -20.857  -7.877  1.00 29.87
ATOM  10283  OD1  ASN  1539     16.946 -20.333  -7.935  1.00 31.66
ATOM  10284  ND2  ASN  1539     18.367 -21.956  -8.560  1.00 32.41
ATOM  10285  C    ASN  1539     20.120 -18.266  -5.905  1.00 21.17
ATOM  10286  O    ASN  1539     20.100 -18.785  -4.787  1.00 22.27
ATOM  10287  N    VAL  1540     20.973 -17.303  -6.229  1.00 18.20
ATOM  10288  CA   VAL  1540     21.922 -16.778  -5.255  1.00 17.11
ATOM  10289  CB   VAL  1540     23.383 -17.043  -5.672  1.00 16.57
ATOM  10290  CG1  VAL  1540     24.322 -16.576  -4.558  1.00 19.33
ATOM  10291  CG2  VAL  1540     23.583 -18.517  -5.941  1.00 17.44
ATOM  10292  C    VAL  1540     21.699 -15.284  -5.161  1.00 15.86
ATOM  10293  O    VAL  1540     21.949 -14.537  -6.113  1.00 14.51
ATOM  10294  N    MET  1541     21.218 -14.845  -4.008  1.00 14.44
ATOM  10295  CA   MET  1541     20.921 -13.437  -3.815  1.00 14.69
ATOM  10296  CB   MET  1541     19.408 -13.226  -3.696  1.00 16.00
ATOM  10297  CG   MET  1541     18.661 -13.438  -4.990  1.00 17.44
ATOM  10298  SD   MET  1541     16.908 -13.405  -4.789  1.00 18.84
ATOM  10299  CE   MET  1541     16.460 -15.008  -5.443  1.00 17.64
ATOM  10300  C    MET  1541     21.579 -12.869  -2.586  1.00 14.81
ATOM  10301  O    MET  1541     21.776 -13.564  -1.587  1.00 15.31
ATOM  10302  N    LEU  1542     21.885 -11.585  -2.656  1.00 14.00
ATOM  10303  CA   LEU  1542     22.518 -10.920  -1.537  1.00 13.41
ATOM  10304  CB   LEU  1542     23.945 -10.527  -1.929  1.00 16.33
ATOM  10305  CG   LEU  1542     24.874  -9.753  -0.982  1.00 22.57
ATOM  10306  CD1  LEU  1542     24.655  -8.278  -1.204  1.00 25.11
ATOM  10307  CD2  LEU  1542     24.678 -10.149   0.485  1.00 19.55
ATOM  10308  C    LEU  1542     21.726  -9.706  -1.077  1.00 11.50
ATOM  10309  O    LEU  1542     21.406  -8.814  -1.862  1.00 11.99
ATOM  10310  N    VAL  1543     21.394  -9.701   0.210  1.00 12.88
ATOM  10311  CA   VAL  1543     20.685  -8.590   0.805  1.00 12.95
ATOM  10312  CB   VAL  1543     19.750  -9.067   1.918  1.00 14.28
ATOM  10313  CG1  VAL  1543     19.016  -7.885   2.529  1.00 15.11
ATOM  10314  CG2  VAL  1543     18.759 -10.079   1.344  1.00 13.81
ATOM  10315  C    VAL  1543     21.838  -7.785   1.377  1.00 14.63
ATOM  10316  O    VAL  1543     22.264  -7.998   2.516  1.00 14.81
ATOM  10317  N    GLY  1544     22.362  -6.883   0.557  1.00 14.42
ATOM  10318  CA   GLY  1544     23.503  -6.088   0.966  1.00 16.82
ATOM  10319  C    GLY  1544     23.197  -4.703   1.471  1.00 16.06
ATOM  10320  O    GLY  1544     22.122  -4.155   1.207  1.00 17.57
ATOM  10321  N    ASP  1545     24.153  -4.126   2.196  1.00 16.67
ATOM  10322  CA   ASP  1545     23.945  -2.796   2.730  1.00 16.34
ATOM  10323  CB   ASP  1545     24.990  -2.444   3.808  1.00 18.01
ATOM  10324  CG   ASP  1545     26.422  -2.547   3.324  1.00 17.58
ATOM  10325  OD1  ASP  1545     26.656  -2.778   2.126  1.00 18.33
ATOM  10326  OD2  ASP  1545     27.321  -2.384   4.171  1.00 20.23
ATOM  10327  C    ASP  1545     23.910  -1.765   1.613  1.00 15.12
ATOM  10328  O    ASP  1545     23.718  -0.578   1.860  1.00 17.15
ATOM  10329  N    SER  1546     24.066  -2.223   0.373  1.00 15.22
ATOM  10330  CA   SER  1546     23.966  -1.307  -0.752  1.00 13.69
ATOM  10331  CB   SER  1546     24.223  -2.036  -2.077  1.00 16.92
ATOM  10332  OG   SER  1546     23.495  -3.253  -2.157  1.00 16.30
ATOM  10333  C    SER  1546     22.554  -0.721  -0.725  1.00 15.02
ATOM  10334  O    SER  1546     22.302   0.346  -1.289  1.00 16.38
ATOM  10335  N    LEU  1547     21.627  -1.411  -0.057  1.00 13.61
ATOM  10336  CA   LEU  1547     20.255  -0.904   0.033  1.00 13.00
ATOM  10337  CB   LEU  1547     19.359  -1.891   0.804  1.00 14.09
ATOM  10338  CG   LEU  1547     19.730  -2.207   2.259  1.00 11.97
ATOM  10339  CD1  LEU  1547     19.088  -1.193   3.174  1.00 17.68
ATOM  10340  CD2  LEU  1547     19.261  -3.621   2.631  1.00 16.59
ATOM  10341  C    LEU  1547     20.246   0.471   0.711  1.00 13.72
ATOM  10342  O    LEU  1547     19.303   1.249   0.556  1.00 12.82
ATOM  10343  N    GLY  1548     21.302   0.768   1.462  1.00 14.37
ATOM  10344  CA   GLY  1548     21.386   2.059   2.128  1.00 13.78
ATOM  10345  C    GLY  1548     21.310   3.187   1.120  1.00 15.41
ATOM  10346  O    GLY  1548     20.786   4.267   1.403  1.00 15.37
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ATOM   10347  N   MET  1549      21.805   2.914  -0.083  1.00 16.39
ATOM   10348  CA  MET  1549      21.825   3.900  -1.151  1.00 16.76
ATOM   10349  CB  MET  1549      23.198   3.852  -1.842  1.00 18.82
ATOM   10350  CG  MET  1549      24.346   4.147  -0.882  1.00 20.11
ATOM   10351  SD  MET  1549      26.012   3.963  -1.563  1.00 26.68
ATOM   10352  CE  MET  1549      26.138   5.439  -2.542  1.00 27.73
ATOM   10353  C   MET  1549      20.696   3.703  -2.165  1.00 17.66
ATOM   10354  O   MET  1549      19.935   4.627  -2.443  1.00 19.20
ATOM   10355  N   THR  1550      20.567   2.495  -2.700  1.00 17.07
ATOM   10356  CA  THR  1550      19.529   2.234  -3.693  1.00 17.56
ATOM   10357  CB  THR  1550      19.809   0.931  -4.439  1.00 21.36
ATOM   10358  OG1 THR  1550      18.737   0.665  -5.349  1.00 29.04
ATOM   10359  CG2 THR  1550      19.953  -0.219  -3.472  1.00 19.69
ATOM   10360  C   THR  1550      18.103   2.191  -3.143  1.00 17.30
ATOM   10361  O   THR  1550      17.144   2.507  -3.853  1.00 19.51
ATOM   10362  N   VAL  1551      17.949   1.800  -1.884  1.00 16.88
ATOM   10363  CA  VAL  1551      16.616   1.741  -1.297  1.00 15.66
ATOM   10364  CB  VAL  1551      16.412   0.423  -0.504  1.00 16.16
ATOM   10365  CG1 VAL  1551      15.077   0.454   0.240  1.00 15.49
ATOM   10366  CG2 VAL  1551      16.436  -0.760  -1.452  1.00 17.32
ATOM   10367  C   VAL  1551      16.344   2.929  -0.377  1.00 14.94
ATOM   10368  O   VAL  1551      15.351   3.635  -0.540  1.00 13.06
ATOM   10369  N   GLN  1552      17.231   3.155   0.584  1.00 13.60
ATOM   10370  CA  GLN  1552      17.041   4.242   1.536  1.00 13.62
ATOM   10371  CB  GLN  1552      17.857   3.963   2.798  1.00 14.36
ATOM   10372  CG  GLN  1552      17.589   2.569   3.329  1.00 15.64
ATOM   10373  CD  GLN  1552      18.298   2.290   4.628  1.00 14.11
ATOM   10374  OE1 GLN  1552      19.342   2.875   4.914  1.00 17.01
ATOM   10375  NE2 GLN  1552      17.744   1.372   5.418  1.00 12.68
ATOM   10376  C   GLN  1552      17.396   5.610   0.968  1.00 12.37
ATOM   10377  O   GLN  1552      16.852   6.625   1.403  1.00 13.34
ATOM   10378  N   GLY  1553      18.312   5.643   0.007  1.00 13.54
ATOM   10379  CA  GLY  1553      18.679   6.914  -0.585  1.00 12.70
ATOM   10380  C   GLY  1553      19.761   7.687   0.140  1.00 16.01
ATOM   10381  O   GLY  1553      19.859   8.905  -0.013  1.00 14.75
ATOM   10382  N   HIS  1554      20.563   6.999   0.948  1.00 16.13
ATOM   10383  CA  HIS  1554      21.659   7.665   1.655  1.00 19.25
ATOM   10384  CB  HIS  1554      22.058   6.870   2.901  1.00 18.68
ATOM   10385  CG  HIS  1554      21.002   6.837   3.962  1.00 18.56
ATOM   10386  CD2 HIS  1554      20.261   5.814   4.452  1.00 18.97
ATOM   10387  ND1 HIS  1554      20.599   7.964   4.646  1.00 19.57
ATOM   10388  CE1 HIS  1554      19.654   7.637   5.509  1.00 21.71
ATOM   10389  NE2 HIS  1554      19.429   6.338   5.412  1.00 16.82
ATOM   10390  C   HIS  1554      22.845   7.761   0.692  1.00 20.59
ATOM   10391  O   HIS  1554      22.867   7.081  -0.332  1.00 20.01
ATOM   10392  N   ASP  1555      23.824   8.604   1.023  1.00 23.52
ATOM   10393  CA  ASP  1555      25.007   8.786   0.182  1.00 25.86
ATOM   10394  CB  ASP  1555      25.650  10.153   0.451  1.00 31.31
ATOM   10395  CG  ASP  1555      25.964  10.375   1.919  1.00 34.15
ATOM   10396  OD1 ASP  1555      26.709   9.570   2.509  1.00 37.32
ATOM   10397  OD2 ASP  1555      25.461  11.366   2.489  1.00 40.85
ATOM   10398  C   ASP  1555      26.055   7.695   0.374  1.00 25.31
ATOM   10399  O   ASP  1555      27.045   7.637  -0.356  1.00 27.92
ATOM   10400  N   SER  1556      25.841   6.832   1.359  1.00 21.86
ATOM   10401  CA  SER  1556      26.769   5.742   1.627  1.00 19.58
ATOM   10402  CB  SER  1556      27.890   6.195   2.569  1.00 18.25
ATOM   10403  OG  SER  1556      27.408   6.452   3.880  1.00 19.02
ATOM   10404  C   SER  1556      25.987   4.608   2.264  1.00 18.25
ATOM   10405  O   SER  1556      24.791   4.739   2.491  1.00 16.30
ATOM   10406  N   THR  1557      26.665   3.505   2.560  1.00 16.59
ATOM   10407  CA  THR  1557      26.011   2.353   3.156  1.00 16.89
ATOM   10408  CB  THR  1557      26.639   1.033   2.664  1.00 17.09
ATOM   10409  OG1 THR  1557      27.965   0.921   3.192  1.00 17.06
ATOM   10410  CG2 THR  1557      26.698   0.996   1.134  1.00 17.62
ATOM   10411  C   THR  1557      26.079   2.350   4.682  1.00 16.25
ATOM   10412  O   THR  1557      25.424   1.530   5.315  1.00 16.54
ATOM   10413  N   LEU  1558      26.858   3.257   5.274  1.00 15.68
ATOM   10414  CA  LEU  1558      27.018   3.301   6.738  1.00 16.74
ATOM   10415  CB  LEU  1558      27.954   4.450   7.141  1.00 17.19
ATOM   10416  CG  LEU  1558      29.465   4.181   7.061  1.00 17.43
ATOM   10417  CD1 LEU  1558      29.864   3.894   5.620  1.00 17.48
ATOM   10418  CD2 LEU  1558      30.223   5.395   7.599  1.00 18.51
ATOM   10419  C   LEU  1558      25.747   3.376   7.596  1.00 15.47
ATOM   10420  O   LEU  1558      25.676   2.770   8.666  1.00 14.85
ATOM   10421  N   PRO  1559      24.736   4.134   7.156  1.00 16.50
ATOM   10422  CD  PRO  1559      24.743   5.128   6.072  1.00 15.31
ATOM   10423  CA  PRO  1559      23.507   4.227   7.951  1.00 15.63
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ATOM	10424	CB	PRO	1559	22.736	5.358	7.271	1.00	18.98
ATOM	10425	CG	PRO	1559	23.279	5.362	5.865	1.00	21.76
ATOM	10426	C	PRO	1559	22.685	2.940	8.055	1.00	15.29
ATOM	10427	O	PRO	1559	21.786	2.840	8.894	1.00	16.41
ATOM	10428	N	VAL	1560	22.988	1.951	7.223	1.00	14.37
ATOM	10429	CA	VAL	1560	22.236	0.703	7.263	1.00	13.86
ATOM	10430	CB	VAL	1560	22.636	-0.220	6.088	1.00	13.89
ATOM	10431	CG1	VAL	1560	21.928	-1.553	6.199	1.00	15.90
ATOM	10432	CG2	VAL	1560	22.293	0.446	4.773	1.00	12.67
ATOM	10433	C	VAL	1560	22.500	-0.025	8.579	1.00	13.66
ATOM	10434	O	VAL	1560	23.653	-0.180	8.993	1.00	12.04
ATOM	10435	N	THR	1561	21.448	-0.467	9.254	1.00	14.89
ATOM	10436	CA	THR	1561	21.676	-1.191	10.500	1.00	18.92
ATOM	10437	CB	THR	1561	21.076	-0.416	11.713	1.00	25.70
ATOM	10438	OG1	THR	1561	22.006	0.601	12.128	1.00	30.54
ATOM	10439	CG2	THR	1561	20.806	-1.340	12.899	1.00	27.97
ATOM	10440	C	THR	1561	21.179	-2.632	10.388	1.00	17.00
ATOM	10441	O	THR	1561	20.535	-2.998	9.405	1.00	13.03
ATOM	10442	N	VAL	1562	21.516	-3.458	11.375	1.00	14.93
ATOM	10443	CA	VAL	1562	21.134	-4.868	11.378	1.00	13.72
ATOM	10444	CB	VAL	1562	21.617	-5.554	12.691	1.00	14.94
ATOM	10445	CG1	VAL	1562	21.157	-7.006	12.747	1.00	13.33
ATOM	10446	CG2	VAL	1562	23.136	-5.481	12.760	1.00	15.87
ATOM	10447	C	VAL	1562	19.633	-5.044	11.218	1.00	13.79
ATOM	10448	O	VAL	1562	19.184	-5.919	10.477	1.00	11.90
ATOM	10449	N	ALA	1563	18.862	-4.205	11.906	1.00	12.57
ATOM	10450	CA	ALA	1563	17.410	-4.266	11.818	1.00	13.52
ATOM	10451	CB	ALA	1563	16.793	-3.175	12.665	1.00	15.49
ATOM	10452	C	ALA	1563	16.967	-4.106	10.367	1.00	13.22
ATOM	10453	O	ALA	1563	16.055	-4.796	9.905	1.00	11.97
ATOM	10454	N	ASP	1564	17.603	-3.185	9.649	1.00	13.76
ATOM	10455	CA	ASP	1564	17.258	-2.973	8.243	1.00	14.61
ATOM	10456	CB	ASP	1564	18.111	-1.873	7.601	1.00	12.63
ATOM	10457	CG	ASP	1564	17.836	-0.491	8.172	1.00	15.27
ATOM	10458	OD1	ASP	1564	16.732	-0.262	8.711	1.00	12.78
ATOM	10459	OD2	ASP	1564	18.735	0.359	8.042	1.00	13.15
ATOM	10460	C	ASP	1564	17.501	-4.243	7.448	1.00	13.99
ATOM	10461	O	ASP	1564	16.647	-4.696	6.685	1.00	12.31
ATOM	10462	N	ILE	1565	18.696	-4.802	7.602	1.00	12.52
ATOM	10463	CA	ILE	1565	19.042	-6.019	6.878	1.00	11.04
ATOM	10464	CB	ILE	1565	20.450	-6.514	7.251	1.00	12.44
ATOM	10465	CG2	ILE	1565	20.699	-7.867	6.594	1.00	12.14
ATOM	10466	CG1	ILE	1565	21.501	-5.478	6.817	1.00	9.14
ATOM	10467	CD1	ILE	1565	21.658	-5.322	5.303	1.00	13.72
ATOM	10468	C	ILE	1565	18.034	-7.132	7.160	1.00	11.12
ATOM	10469	O	ILE	1565	17.606	-7.822	6.247	1.00	10.33
ATOM	10470	N	ALA	1566	17.651	-7.309	8.422	1.00	9.51
ATOM	10471	CA	ALA	1566	16.699	-8.364	8.743	1.00	10.56
ATOM	10472	CB	ALA	1566	16.495	-8.460	10.241	1.00	10.34
ATOM	10473	C	ALA	1566	15.365	-8.141	8.050	1.00	8.48
ATOM	10474	O	ALA	1566	14.744	-9.084	7.553	1.00	10.65
ATOM	10475	N	TYR	1567	14.919	-6.894	8.028	1.00	10.49
ATOM	10476	CA	TYR	1567	13.644	-6.538	7.394	1.00	10.89
ATOM	10477	CB	TYR	1567	13.426	-5.023	7.478	1.00	11.37
ATOM	10478	CG	TYR	1567	12.216	-4.515	6.708	1.00	13.66
ATOM	10479	CD1	TYR	1567	10.925	-4.761	7.163	1.00	12.46
ATOM	10480	CE1	TYR	1567	9.816	-4.222	6.513	1.00	14.53
ATOM	10481	CD2	TYR	1567	12.373	-3.724	5.568	1.00	15.00
ATOM	10482	CE2	TYR	1567	11.277	-3.180	4.909	1.00	14.51
ATOM	10483	CZ	TYR	1567	10.002	-3.429	5.391	1.00	14.84
ATOM	10484	OH	TYR	1567	8.917	-2.852	4.784	1.00	13.91
ATOM	10485	C	TYR	1567	13.639	-6.960	5.933	1.00	10.89
ATOM	10486	O	TYR	1567	12.708	-7.617	5.460	1.00	10.65
ATOM	10487	N	HIS	1568	14.682	-6.558	5.217	1.00	10.43
ATOM	10488	CA	HIS	1568	14.775	-6.881	3.801	1.00	10.21
ATOM	10489	CB	HIS	1568	15.842	-5.998	3.140	1.00	11.31
ATOM	10490	CG	HIS	1568	15.411	-4.565	2.971	1.00	11.56
ATOM	10491	CD2	HIS	1568	15.646	-3.467	3.731	1.00	11.51
ATOM	10492	ND1	HIS	1568	14.579	-4.149	1.953	1.00	12.16
ATOM	10493	CE1	HIS	1568	14.319	-2.861	2.091	1.00	13.74
ATOM	10494	NE2	HIS	1568	14.954	-2.422	3.163	1.00	12.66
ATOM	10495	C	HIS	1568	15.044	-8.370	3.594	1.00	11.46
ATOM	10496	O	HIS	1568	14.540	-8.977	2.643	1.00	10.22
ATOM	10497	N	THR	1569	15.819	-8.970	4.492	1.00	10.71
ATOM	10498	CA	THR	1569	16.104	-10.397	4.390	1.00	10.69
ATOM	10499	CB	THR	1569	17.054	-10.853	5.521	1.00	12.47
ATOM	10500	OG1	THR	1569	18.347	-10.273	5.306	1.00	10.54

ATOM	10501	CG2	THR	1569	17.169	-12.392	5.559	1.00	11.72
ATOM	10502	C	THR	1569	14.822	-11.236	4.436	1.00	12.77
ATOM	10503	O	THR	1569	14.657	-12.170	3.646	1.00	11.27
ATOM	10504	N	ALA	1570	13.915	-10.915	5.359	1.00	11.72
ATOM	10505	CA	ALA	1570	12.666	-11.671	5.471	1.00	13.45
ATOM	10506	CB	ALA	1570	11.861	-11.200	6.689	1.00	12.98
ATOM	10507	C	ALA	1570	11.819	-11.544	4.211	1.00	12.73
ATOM	10508	O	ALA	1570	11.182	-12.506	3.784	1.00	13.55
ATOM	10509	N	ALA	1571	11.804	-10.348	3.628	1.00	12.25
ATOM	10510	CA	ALA	1571	11.028	-10.110	2.422	1.00	10.68
ATOM	10511	CB	ALA	1571	11.014	-8.619	2.086	1.00	10.51
ATOM	10512	C	ALA	1571	11.615	-10.907	1.262	1.00	11.99
ATOM	10513	O	ALA	1571	10.881	-11.499	0.477	1.00	11.47
ATOM	10514	N	VAL	1572	12.939	-10.923	1.144	1.00	13.05
ATOM	10515	CA	VAL	1572	13.553	-11.687	0.064	1.00	13.95
ATOM	10516	CB	VAL	1572	15.075	-11.473	0.004	1.00	13.81
ATOM	10517	CG1	VAL	1572	15.701	-12.485	-0.954	1.00	14.45
ATOM	10518	CG2	VAL	1572	15.379	-10.050	-0.458	1.00	14.01
ATOM	10519	C	VAL	1572	13.271	-13.178	0.239	1.00	14.25
ATOM	10520	O	VAL	1572	12.956	-13.888	-0.727	1.00	14.24
ATOM	10521	N	ARG	1573	13.388	-13.659	1.471	1.00	13.28
ATOM	10522	CA	ARG	1573	13.137	-15.066	1.733	1.00	12.96
ATOM	10523	CB	ARG	1573	13.418	-15.409	3.208	1.00	12.40
ATOM	10524	CG	ARG	1573	13.134	-16.875	3.564	1.00	14.12
ATOM	10525	CD	ARG	1573	13.891	-17.820	2.636	1.00	11.99
ATOM	10526	NE	ARG	1573	15.299	-17.944	3.009	1.00	15.31
ATOM	10527	CZ	ARG	1573	16.238	-18.497	2.248	1.00	17.73
ATOM	10528	NH1	ARG	1573	15.931	-18.981	1.048	1.00	18.85
ATOM	10529	NH2	ARG	1573	17.486	-18.589	2.696	1.00	15.43
ATOM	10530	C	ARG	1573	11.701	-15.460	1.358	1.00	12.91
ATOM	10531	O	ARG	1573	11.467	-16.569	0.882	1.00	14.66
ATOM	10532	N	ARG	1574	10.740	-14.561	1.559	1.00	15.46
ATOM	10533	CA	ARG	1574	9.356	-14.883	1.214	1.00	13.92
ATOM	10534	CB	ARG	1574	8.392	-13.802	1.707	1.00	14.87
ATOM	10535	CG	ARG	1574	8.358	-13.622	3.212	1.00	17.41
ATOM	10536	CD	ARG	1574	7.182	-12.767	3.655	1.00	17.23
ATOM	10537	NE	ARG	1574	7.241	-12.534	5.096	1.00	19.59
ATOM	10538	CZ	ARG	1574	7.851	-11.505	5.673	1.00	20.15
ATOM	10539	NH1	ARG	1574	8.459	-10.577	4.939	1.00	17.97
ATOM	10540	NH2	ARG	1574	7.882	-11.421	6.995	1.00	23.22
ATOM	10541	C	ARG	1574	9.210	-15.013	-0.294	1.00	13.49
ATOM	10542	O	ARG	1574	8.380	-15.777	-0.786	1.00	14.10
ATOM	10543	N	GLY	1575	10.017	-14.256	-1.024	1.00	12.47
ATOM	10544	CA	GLY	1575	9.949	-14.297	-2.474	1.00	15.24
ATOM	10545	C	GLY	1575	10.693	-15.461	-3.096	1.00	16.10
ATOM	10546	O	GLY	1575	10.307	-15.961	-4.150	1.00	17.71
ATOM	10547	N	ALA	1576	11.761	-15.894	-2.441	1.00	15.51
ATOM	10548	CA	ALA	1576	12.577	-16.990	-2.950	1.00	16.76
ATOM	10549	CB	ALA	1576	13.834	-16.430	-3.584	1.00	18.02
ATOM	10550	C	ALA	1576	12.935	-17.923	-1.800	1.00	16.86
ATOM	10551	O	ALA	1576	14.065	-17.923	-1.318	1.00	17.30
ATOM	10552	N	PRO	1577	11.977	-18.756	-1.368	1.00	18.36
ATOM	10553	CD	PRO	1577	10.647	-18.935	-1.980	1.00	17.74
ATOM	10554	CA	PRO	1577	12.176	-19.696	-0.262	1.00	19.18
ATOM	10555	CB	PRO	1577	10.783	-20.287	-0.063	1.00	19.74
ATOM	10556	CG	PRO	1577	10.218	-20.291	-1.442	1.00	22.52
ATOM	10557	C	PRO	1577	13.255	-20.767	-0.421	1.00	21.10
ATOM	10558	O	PRO	1577	13.664	-21.380	0.566	1.00	21.21
ATOM	10559	N	ASN	1578	13.725	-20.987	-1.647	1.00	19.12
ATOM	10560	CA	ASN	1578	14.741	-22.008	-1.879	1.00	19.33
ATOM	10561	CB	ASN	1578	14.237	-23.029	-2.898	1.00	23.93
ATOM	10562	CG	ASN	1578	12.980	-23.737	-2.435	1.00	26.55
ATOM	10563	OD1	ASN	1578	12.942	-24.304	-1.344	1.00	30.38
ATOM	10564	ND2	ASN	1578	11.942	-23.707	-3.266	1.00	30.04
ATOM	10565	C	ASN	1578	16.077	-21.465	-2.347	1.00	18.42
ATOM	10566	O	ASN	1578	16.972	-22.230	-2.711	1.00	17.87
ATOM	10567	N	CYS	1579	16.230	-20.148	-2.333	1.00	16.75
ATOM	10568	CA	CYS	1579	17.486	-19.565	-2.794	1.00	16.63
ATOM	10569	CB	CYS	1579	17.268	-18.119	-3.256	1.00	18.58
ATOM	10570	SG	CYS	1579	17.273	-16.870	-1.911	1.00	20.66
ATOM	10571	C	CYS	1579	18.550	-19.569	-1.708	1.00	16.46
ATOM	10572	O	CYS	1579	18.254	-19.737	-0.523	1.00	16.94
ATOM	10573	N	LEU	1580	19.797	-19.406	-2.127	1.00	16.30
ATOM	10574	CA	LEU	1580	20.901	-19.306	-1.183	1.00	16.34
ATOM	10575	CB	LEU	1580	22.225	-19.741	-1.820	1.00	16.18
ATOM	10576	CG	LEU	1580	23.496	-19.451	-1.005	1.00	16.78
ATOM	10577	CD1	LEU	1580	23.455	-20.123	0.360	1.00	18.05

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ATOM   10578  CD2 LEU  1580     24.697 -19.931  -1.797  1.00 19.94
ATOM   10579  C   LEU  1580     20.894 -17.803  -0.914  1.00 16.05
ATOM   10580  O   LEU  1580     21.150 -16.998  -1.813  1.00 13.83
ATOM   10581  N   LEU  1581     20.568 -17.437   0.321  1.00 16.04
ATOM   10582  CA  LEU  1581     20.455 -16.039   0.704  1.00 15.99
ATOM   10583  CB  LEU  1581     19.135 -15.812   1.472  1.00 16.23
ATOM   10584  CG  LEU  1581     18.506 -14.413   1.600  1.00 17.05
ATOM   10585  CD1 LEU  1581     17.114 -14.552   2.230  1.00 16.42
ATOM   10586  CD2 LEU  1581     19.380 -13.487   2.444  1.00 19.60
ATOM   10587  C   LEU  1581     21.617 -15.583   1.569  1.00 16.66
ATOM   10588  O   LEU  1581     21.781 -16.063   2.684  1.00 15.52
ATOM   10589  N   LEU  1582     22.428 -14.679   1.032  1.00 15.45
ATOM   10590  CA  LEU  1582     23.536 -14.105   1.761  1.00 16.37
ATOM   10591  CB  LEU  1582     24.732 -13.839   0.850  1.00 17.30
ATOM   10592  CG  LEU  1582     25.836 -14.894   0.746  1.00 18.08
ATOM   10593  CD1 LEU  1582     25.274 -16.177   0.172  1.00 19.04
ATOM   10594  CD2 LEU  1582     26.966 -14.348  -0.130  1.00 20.45
ATOM   10595  C   LEU  1582     23.032 -12.769   2.290  1.00 16.32
ATOM   10596  O   LEU  1582     22.308 -12.046   1.593  1.00 18.36
ATOM   10597  N   ALA  1583     23.399 -12.447   3.521  1.00 15.51
ATOM   10598  CA  ALA  1583     22.999 -11.183   4.111  1.00 14.69
ATOM   10599  CB  ALA  1583     21.994 -11.416   5.219  1.00 14.69
ATOM   10600  C   ALA  1583     24.234 -10.491   4.667  1.00 14.14
ATOM   10601  O   ALA  1583     25.051 -11.112   5.344  1.00 13.73
ATOM   10602  N   ASP  1584     24.376  -9.207   4.362  1.00 13.35
ATOM   10603  CA  ASP  1584     25.505  -8.429   4.855  1.00 14.49
ATOM   10604  CB  ASP  1584     25.647  -7.117   4.091  1.00 15.94
ATOM   10605  CG  ASP  1584     26.458  -7.241   2.830  1.00 17.35
ATOM   10606  OD1 ASP  1584     27.193  -8.226   2.661  1.00 20.03
ATOM   10607  OD2 ASP  1584     26.357  -6.311   2.006  1.00 18.72
ATOM   10608  C   ASP  1584     25.332  -8.032   6.304  1.00 13.45
ATOM   10609  O   ASP  1584     24.219  -7.753   6.739  1.00 12.56
ATOM   10610  N   LEU  1585     26.427  -8.040   7.056  1.00 12.65
ATOM   10611  CA  LEU  1585     26.381  -7.514   8.410  1.00 13.11
ATOM   10612  CB  LEU  1585     27.360  -8.227   9.356  1.00 13.48
ATOM   10613  CG  LEU  1585     26.969  -9.646   9.777  1.00 13.68
ATOM   10614  CD1 LEU  1585     27.863 -10.134  10.933  1.00 12.03
ATOM   10615  CD2 LEU  1585     25.504  -9.664  10.207  1.00 14.07
ATOM   10616  C   LEU  1585     26.877  -6.102   8.080  1.00 15.51
ATOM   10617  O   LEU  1585     27.954  -5.926   7.483  1.00 15.43
ATOM   10618  N   PRO  1586     26.083  -5.082   8.422  1.00 14.53
ATOM   10619  CD  PRO  1586     24.747  -5.205   9.030  1.00 16.55
ATOM   10620  CA  PRO  1586     26.413  -3.681   8.163  1.00 14.80
ATOM   10621  CB  PRO  1586     25.078  -2.974   8.385  1.00 14.42
ATOM   10622  CG  PRO  1586     24.459  -3.794   9.483  1.00 15.58
ATOM   10623  C   PRO  1586     27.540  -3.066   8.993  1.00 15.36
ATOM   10624  O   PRO  1586     28.135  -3.709   9.864  1.00 13.48
ATOM   10625  N   PHE  1587     27.808  -1.799   8.695  1.00 13.29
ATOM   10626  CA  PHE  1587     28.831  -1.006   9.359  1.00 15.40
ATOM   10627  CB  PHE  1587     28.626   0.466   8.995  1.00 15.27
ATOM   10628  CG  PHE  1587     29.456   1.415   9.808  1.00 16.43
ATOM   10629  CD1 PHE  1587     30.845   1.346   9.776  1.00 15.91
ATOM   10630  CD2 PHE  1587     28.848   2.378  10.610  1.00 16.81
ATOM   10631  CE1 PHE  1587     31.619   2.215  10.533  1.00 19.06
ATOM   10632  CE2 PHE  1587     29.619   3.257  11.374  1.00 18.87
ATOM   10633  CZ  PHE  1587     31.009   3.174  11.332  1.00 18.40
ATOM   10634  C   PHE  1587     28.804  -1.176  10.875  1.00 14.93
ATOM   10635  O   PHE  1587     27.783  -0.954  11.513  1.00 13.77
ATOM   10636  N   MET  1588     29.944  -1.580  11.431  1.00 16.41
ATOM   10637  CA  MET  1588     30.115  -1.783  12.866  1.00 15.60
ATOM   10638  CB  MET  1588     29.958  -0.452  13.610  1.00 15.47
ATOM   10639  CG  MET  1588     30.753  -0.398  14.899  1.00 17.28
ATOM   10640  SD  MET  1588     32.552  -0.481  14.654  1.00 16.90
ATOM   10641  CE  MET  1588     32.900   1.224  14.358  1.00 19.88
ATOM   10642  C   MET  1588     29.182  -2.825  13.480  1.00 14.81
ATOM   10643  O   MET  1588     28.832  -2.742  14.659  1.00 16.79
ATOM   10644  N   ALA  1589     28.782  -3.809  12.689  1.00 13.82
ATOM   10645  CA  ALA  1589     27.901  -4.853  13.196  1.00 14.09
ATOM   10646  CB  ALA  1589     26.873  -5.228  12.123  1.00 14.61
ATOM   10647  C   ALA  1589     28.707  -6.079  13.617  1.00 14.92
ATOM   10648  O   ALA  1589     28.148  -7.055  14.116  1.00 17.78
ATOM   10649  N   TYR  1590     30.024  -6.023  13.421  1.00 14.09
ATOM   10650  CA  TYR  1590     30.911  -7.130  13.775  1.00 15.98
ATOM   10651  CB  TYR  1590     31.164  -8.010  12.543  1.00 16.40
ATOM   10652  CG  TYR  1590     31.512  -7.250  11.277  1.00 15.39
ATOM   10653  CD1 TYR  1590     32.816  -7.232  10.783  1.00 13.60
ATOM   10654  CE1 TYR  1590     33.127  -6.558   9.596  1.00 15.26
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ATOM	10655	CD2	TYR	1590	30.524	-6.571	10.559	1.00	14.41
ATOM	10656	CE2	TYR	1590	30.818	-5.895	9.378	1.00	14.95
ATOM	10657	CZ	TYR	1590	32.118	-5.895	8.901	1.00	14.53
ATOM	10658	OH	TYR	1590	32.380	-5.247	7.718	1.00	14.98
ATOM	10659	C	TYR	1590	32.225	-6.601	14.334	1.00	16.91
ATOM	10660	O	TYR	1590	33.303	-7.077	13.980	1.00	17.15
ATOM	10661	N	ALA	1591	32.109	-5.626	15.235	1.00	16.90
ATOM	10662	CA	ALA	1591	33.257	-4.973	15.863	1.00	18.12
ATOM	10663	CB	ALA	1591	32.790	-3.734	16.617	1.00	16.82
ATOM	10664	C	ALA	1591	34.012	-5.909	16.798	1.00	17.70
ATOM	10665	O	ALA	1591	35.212	-5.759	17.005	1.00	16.35
ATOM	10666	N	THR	1592	33.289	-6.868	17.366	1.00	17.84
ATOM	10667	CA	THR	1592	33.871	-7.863	18.254	1.00	17.19
ATOM	10668	CB	THR	1592	33.583	-7.570	19.739	1.00	17.53
ATOM	10669	OG1	THR	1592	32.176	-7.682	19.991	1.00	16.88
ATOM	10670	CG2	THR	1592	34.059	-6.169	20.112	1.00	16.17
ATOM	10671	C	THR	1592	33.208	-9.184	17.900	1.00	15.81
ATOM	10672	O	THR	1592	32.114	-9.201	17.329	1.00	13.62
ATOM	10673	N	PRO	1593	33.860	-10.310	18.223	1.00	16.07
ATOM	10674	CD	PRO	1593	35.254	-10.465	18.675	1.00	16.83
ATOM	10675	CA	PRO	1593	33.260	-11.607	17.903	1.00	16.05
ATOM	10676	CB	PRO	1593	34.278	-12.599	18.459	1.00	17.78
ATOM	10677	CG	PRO	1593	35.587	-11.877	18.233	1.00	16.98
ATOM	10678	C	PRO	1593	31.874	-11.769	18.531	1.00	16.88
ATOM	10679	O	PRO	1593	30.934	-12.190	17.858	1.00	15.90
ATOM	10680	N	GLU	1594	31.746	-11.417	19.810	1.00	17.16
ATOM	10681	CA	GLU	1594	30.467	-11.548	20.507	1.00	17.81
ATOM	10682	CB	GLU	1594	30.606	-11.095	21.966	1.00	21.81
ATOM	10683	CG	GLU	1594	29.392	-11.407	22.830	1.00	29.07
ATOM	10684	CD	GLU	1594	29.657	-11.163	24.308	1.00	34.97
ATOM	10685	OE1	GLU	1594	30.087	-10.036	24.649	1.00	37.17
ATOM	10686	OE2	GLU	1594	29.429	-12.091	25.124	1.00	37.45
ATOM	10687	C	GLU	1594	29.369	-10.755	19.817	1.00	16.20
ATOM	10688	O	GLU	1594	28.233	-11.210	19.721	1.00	14.75
ATOM	10689	N	GLN	1595	29.708	-9.568	19.326	1.00	16.15
ATOM	10690	CA	GLN	1595	28.715	-8.749	18.645	1.00	16.61
ATOM	10691	CB	GLN	1595	29.209	-7.319	18.489	1.00	19.07
ATOM	10692	CG	GLN	1595	29.345	-6.591	19.814	1.00	25.36
ATOM	10693	CD	GLN	1595	29.618	-5.113	19.634	1.00	28.24
ATOM	10694	OE1	GLN	1595	28.854	-4.411	18.974	1.00	30.74
ATOM	10695	NE2	GLN	1595	30.709	-4.629	20.228	1.00	31.60
ATOM	10696	C	GLN	1595	28.401	-9.344	17.282	1.00	13.90
ATOM	10697	O	GLN	1595	27.261	-9.290	16.826	1.00	12.90
ATOM	10698	N	ALA	1596	29.410	-9.918	16.636	1.00	12.16
ATOM	10699	CA	ALA	1596	29.184	-10.530	15.339	1.00	12.33
ATOM	10700	CB	ALA	1596	30.494	-10.993	14.730	1.00	11.02
ATOM	10701	C	ALA	1596	28.212	-11.702	15.484	1.00	12.04
ATOM	10702	O	ALA	1596	27.345	-11.897	14.632	1.00	11.82
ATOM	10703	N	PHE	1597	28.340	-12.470	16.566	1.00	13.20
ATOM	10704	CA	PHE	1597	27.460	-13.630	16.787	1.00	12.23
ATOM	10705	CB	PHE	1597	27.823	-14.392	18.077	1.00	11.34
ATOM	10706	CG	PHE	1597	29.267	-14.829	18.165	1.00	12.72
ATOM	10707	CD1	PHE	1597	29.996	-15.142	17.018	1.00	14.75
ATOM	10708	CD2	PHE	1597	29.881	-14.963	19.406	1.00	13.59
ATOM	10709	CE1	PHE	1597	31.323	-15.586	17.107	1.00	15.56
ATOM	10710	CE2	PHE	1597	31.204	-15.407	19.513	1.00	13.42
ATOM	10711	CZ	PHE	1597	31.921	-15.718	18.354	1.00	15.98
ATOM	10712	C	PHE	1597	26.005	-13.205	16.912	1.00	12.63
ATOM	10713	O	PHE	1597	25.114	-13.834	16.346	1.00	12.34
ATOM	10714	N	GLU	1598	25.778	-12.134	17.667	1.00	12.52
ATOM	10715	CA	GLU	1598	24.434	-11.641	17.892	1.00	13.41
ATOM	10716	CB	GLU	1598	24.456	-10.541	18.955	1.00	16.36
ATOM	10717	CG	GLU	1598	23.081	-10.001	19.313	1.00	23.47
ATOM	10718	CD	GLU	1598	22.273	-10.950	20.189	1.00	28.97
ATOM	10719	OE1	GLU	1598	22.481	-12.188	20.109	1.00	31.03
ATOM	10720	OE2	GLU	1598	21.414	-10.452	20.953	1.00	32.01
ATOM	10721	C	GLU	1598	23.783	-11.113	16.615	1.00	12.74
ATOM	10722	O	GLU	1598	22.634	-11.425	16.321	1.00	11.28
ATOM	10723	N	ASN	1599	24.518	-10.316	15.852	1.00	12.02
ATOM	10724	CA	ASN	1599	23.953	-9.758	14.640	1.00	11.59
ATOM	10725	CB	ASN	1599	24.740	-8.513	14.228	1.00	12.97
ATOM	10726	CG	ASN	1599	24.671	-7.422	15.295	1.00	13.26
ATOM	10727	OD1	ASN	1599	23.617	-7.218	15.908	1.00	13.34
ATOM	10728	ND2	ASN	1599	25.774	-6.712	15.510	1.00	13.73
ATOM	10729	C	ASN	1599	23.865	-10.771	13.507	1.00	11.88
ATOM	10730	O	ASN	1599	22.961	-10.696	12.677	1.00	11.95
ATOM	10731	N	ALA	1600	24.790	-11.724	13.471	1.00	9.53

ATOM	10732	CA	ALA	1600	24.732	-12.754	12.440	1.00	11.81
ATOM	10733	CB	ALA	1600	25.994	-13.610	12.462	1.00	11.15
ATOM	10734	C	ALA	1600	23.503	-13.615	12.742	1.00	11.76
ATOM	10735	O	ALA	1600	22.763	-13.990	11.838	1.00	12.58
ATOM	10736	N	ALA	1601	23.283	-13.922	14.019	1.00	11.05
ATOM	10737	CA	ALA	1601	22.142	-14.746	14.391	1.00	11.07
ATOM	10738	CB	ALA	1601	22.183	-15.080	15.889	1.00	12.88
ATOM	10739	C	ALA	1601	20.830	-14.051	14.038	1.00	11.65
ATOM	10740	O	ALA	1601	19.868	-14.700	13.624	1.00	12.48
ATOM	10741	N	THR	1602	20.782	-12.735	14.198	1.00	10.09
ATOM	10742	CA	THR	1602	19.565	-11.980	13.884	1.00	10.55
ATOM	10743	CB	THR	1602	19.718	-10.486	14.224	1.00	10.24
ATOM	10744	OG1	THR	1602	19.875	-10.342	15.638	1.00	12.17
ATOM	10745	CG2	THR	1602	18.491	-9.703	13.773	1.00	11.96
ATOM	10746	C	THR	1602	19.211	-12.089	12.408	1.00	11.71
ATOM	10747	O	THR	1602	18.060	-12.356	12.052	1.00	10.21
ATOM	10748	N	VAL	1603	20.193	-11.884	11.538	1.00	8.99
ATOM	10749	CA	VAL	1603	19.897	-11.956	10.120	1.00	10.74
ATOM	10750	CB	VAL	1603	20.997	-11.276	9.280	1.00	12.65
ATOM	10751	CG1	VAL	1603	20.519	-11.129	7.858	1.00	19.78
ATOM	10752	CG2	VAL	1603	21.309	-9.885	9.854	1.00	13.29
ATOM	10753	C	VAL	1603	19.679	-13.401	9.675	1.00	10.88
ATOM	10754	O	VAL	1603	18.931	-13.651	8.733	1.00	11.56
ATOM	10755	N	MET	1604	20.322	-14.354	10.352	1.00	10.50
ATOM	10756	CA	MET	1604	20.118	-15.768	10.024	1.00	11.08
ATOM	10757	CB	MET	1604	21.082	-16.672	10.806	1.00	15.41
ATOM	10758	CG	MET	1604	22.562	-16.538	10.462	1.00	18.50
ATOM	10759	SD	MET	1604	22.958	-17.034	8.795	1.00	27.30
ATOM	10760	CE	MET	1604	22.871	-18.884	8.916	1.00	21.09
ATOM	10761	C	MET	1604	18.677	-16.169	10.383	1.00	10.81
ATOM	10762	O	MET	1604	17.984	-16.794	9.584	1.00	13.07
ATOM	10763	N	ARG	1605	18.222	-15.811	11.584	1.00	11.02
ATOM	10764	CA	ARG	1605	16.861	-16.158	11.992	1.00	12.52
ATOM	10765	CB	ARG	1605	16.582	-15.724	13.444	1.00	13.71
ATOM	10766	CG	ARG	1605	17.431	-16.445	14.496	1.00	13.88
ATOM	10767	CD	ARG	1605	16.798	-16.395	15.889	1.00	14.01
ATOM	10768	NE	ARG	1605	17.771	-16.750	16.919	1.00	18.79
ATOM	10769	CZ	ARG	1605	18.649	-15.898	17.433	1.00	18.25
ATOM	10770	NH1	ARG	1605	18.670	-14.636	17.025	1.00	18.55
ATOM	10771	NH2	ARG	1605	19.521	-16.314	18.333	1.00	18.62
ATOM	10772	C	ARG	1605	15.814	-15.534	11.070	1.00	12.91
ATOM	10773	O	ARG	1605	14.724	-16.090	10.900	1.00	12.21
ATOM	10774	N	ALA	1606	16.141	-14.386	10.481	1.00	11.94
ATOM	10775	CA	ALA	1606	15.223	-13.704	9.575	1.00	12.22
ATOM	10776	CB	ALA	1606	15.632	-12.232	9.409	1.00	11.74
ATOM	10777	C	ALA	1606	15.136	-14.374	8.199	1.00	13.18
ATOM	10778	O	ALA	1606	14.274	-14.021	7.392	1.00	14.17
ATOM	10779	N	GLY	1607	16.023	-15.331	7.929	1.00	12.39
ATOM	10780	CA	GLY	1607	15.980	-16.029	6.653	1.00	11.87
ATOM	10781	C	GLY	1607	17.288	-16.273	5.907	1.00	11.83
ATOM	10782	O	GLY	1607	17.316	-17.063	4.960	1.00	15.36
ATOM	10783	N	ALA	1608	18.368	-15.612	6.316	1.00	11.14
ATOM	10784	CA	ALA	1608	19.668	-15.767	5.651	1.00	11.81
ATOM	10785	CB	ALA	1608	20.621	-14.689	6.146	1.00	13.69
ATOM	10786	C	ALA	1608	20.294	-17.151	5.870	1.00	13.84
ATOM	10787	O	ALA	1608	20.013	-17.799	6.870	1.00	11.53
ATOM	10788	N	ASN	1609	21.135	-17.602	4.934	1.00	13.34
ATOM	10789	CA	ASN	1609	21.814	-18.895	5.077	1.00	13.10
ATOM	10790	CB	ASN	1609	21.736	-19.734	3.797	1.00	14.21
ATOM	10791	CG	ASN	1609	20.321	-20.082	3.407	1.00	15.93
ATOM	10792	OD1	ASN	1609	19.606	-20.775	4.137	1.00	18.98
ATOM	10793	ND2	ASN	1609	19.910	-19.610	2.250	1.00	12.95
ATOM	10794	C	ASN	1609	23.293	-18.648	5.344	1.00	14.73
ATOM	10795	O	ASN	1609	24.021	-19.533	5.794	1.00	15.75
ATOM	10796	N	MET	1610	23.732	-17.435	5.049	1.00	13.00
ATOM	10797	CA	MET	1610	25.132	-17.083	5.197	1.00	13.92
ATOM	10798	CB	MET	1610	25.864	-17.514	3.925	1.00	14.99
ATOM	10799	CG	MET	1610	27.293	-17.047	3.789	1.00	18.34
ATOM	10800	SD	MET	1610	27.934	-17.568	2.175	1.00	19.59
ATOM	10801	CE	MET	1610	28.973	-18.934	2.662	1.00	21.61
ATOM	10802	C	MET	1610	25.270	-15.586	5.421	1.00	13.22
ATOM	10803	O	MET	1610	24.400	-14.808	5.028	1.00	12.57
ATOM	10804	N	VAL	1611	26.366	-15.185	6.053	1.00	13.16
ATOM	10805	CA	VAL	1611	26.603	-13.782	6.336	1.00	14.59
ATOM	10806	CB	VAL	1611	26.750	-13.580	7.859	1.00	18.07
ATOM	10807	CG1	VAL	1611	27.320	-12.237	8.152	1.00	23.20
ATOM	10808	CG2	VAL	1611	25.389	-13.741	8.535	1.00	17.45

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ATOM  10809  C    VAL  1611     27.853 -13.289   5.621  1.00 15.11
ATOM  10810  O    VAL  1611     28.844 -14.016   5.518  1.00 13.59
ATOM  10811  N    LYS  1612     27.797 -12.061   5.108  1.00 13.93
ATOM  10812  CA   LYS  1612     28.942 -11.471   4.420  1.00 13.65
ATOM  10813  CB   LYS  1612     28.541 -10.980   3.023  1.00 16.26
ATOM  10814  CG   LYS  1612     29.718 -10.435   2.207  1.00 16.17
ATOM  10815  CD   LYS  1612     29.419 -10.402   0.703  1.00 19.74
ATOM  10816  CE   LYS  1612     28.447  -9.294   0.338  1.00 20.53
ATOM  10817  NZ   LYS  1612     29.054  -7.938   0.547  1.00 18.43
ATOM  10818  C    LYS  1612     29.476 -10.307   5.239  1.00 14.73
ATOM  10819  O    LYS  1612     28.709  -9.454   5.680  1.00 15.46
ATOM  10820  N    ILE  1613     30.792 -10.280   5.439  1.00 15.79
ATOM  10821  CA   ILE  1613     31.436  -9.215   6.210  1.00 17.39
ATOM  10822  CB   ILE  1613     31.868  -9.699   7.623  1.00 17.61
ATOM  10823  CG2  ILE  1613     30.642  -9.920   8.507  1.00 18.44
ATOM  10824  CG1  ILE  1613     32.706 -10.972   7.502  1.00 18.71
ATOM  10825  CD1  ILE  1613     33.102 -11.573   8.835  1.00 21.00
ATOM  10826  C    ILE  1613     32.674  -8.698   5.487  1.00 17.52
ATOM  10827  O    ILE  1613     33.363  -9.453   4.805  1.00 17.34
ATOM  10828  N    GLU  1614     32.948  -7.410   5.658  1.00 18.44
ATOM  10829  CA   GLU  1614     34.077  -6.756   5.014  1.00 22.04
ATOM  10830  CB   GLU  1614     33.699  -5.319   4.650  1.00 21.72
ATOM  10831  CG   GLU  1614     32.556  -5.213   3.663  1.00 24.57
ATOM  10832  CD   GLU  1614     32.210  -3.773   3.316  1.00 25.01
ATOM  10833  OE1  GLU  1614     33.048  -2.879   3.551  1.00 25.95
ATOM  10834  OE2  GLU  1614     31.103  -3.535   2.793  1.00 26.44
ATOM  10835  C    GLU  1614     35.330  -6.730   5.879  1.00 22.81
ATOM  10836  O    GLU  1614     35.270  -6.387   7.059  1.00 23.72
ATOM  10837  N    GLY  1615     36.469  -7.082   5.292  1.00 24.76
ATOM  10838  CA   GLY  1615     37.706  -7.063   6.052  1.00 26.31
ATOM  10839  C    GLY  1615     38.657  -8.191   5.724  1.00 25.48
ATOM  10840  O    GLY  1615     38.264  -9.195   5.132  1.00 26.13
ATOM  10841  N    GLY  1616     39.916  -8.024   6.117  1.00 26.28
ATOM  10842  CA   GLY  1616     40.917  -9.043   5.855  1.00 25.88
ATOM  10843  C    GLY  1616     41.395  -9.771   7.101  1.00 26.83
ATOM  10844  O    GLY  1616     40.592 -10.313   7.862  1.00 26.50
ATOM  10845  N    GLU  1617     42.712  -9.780   7.293  1.00 23.60
ATOM  10846  CA   GLU  1617     43.369 -10.427   8.427  1.00 25.78
ATOM  10847  CB   GLU  1617     44.811  -9.923   8.554  1.00 28.43
ATOM  10848  CG   GLU  1617     45.856 -10.775   7.868  1.00 35.94
ATOM  10849  CD   GLU  1617     46.136 -12.074   8.604  1.00 39.30
ATOM  10850  OE1  GLU  1617     45.199 -12.883   8.770  1.00 39.90
ATOM  10851  OE2  GLU  1617     47.299 -12.283   9.015  1.00 39.51
ATOM  10852  C    GLU  1617     42.718 -10.294   9.800  1.00 23.15
ATOM  10853  O    GLU  1617     42.527 -11.289  10.499  1.00 24.44
ATOM  10854  N    TRP  1618     42.404  -9.069  10.202  1.00 22.84
ATOM  10855  CA   TRP  1618     41.830  -8.855  11.518  1.00 20.46
ATOM  10856  CB   TRP  1618     41.607  -7.364  11.776  1.00 21.59
ATOM  10857  CG   TRP  1618     40.461  -6.766  11.040  1.00 19.95
ATOM  10858  CD2  TRP  1618     39.152  -6.510  11.563  1.00 19.68
ATOM  10859  CE2  TRP  1618     38.392  -5.939  10.521  1.00 17.75
ATOM  10860  CE3  TRP  1618     38.544  -6.723  12.809  1.00 18.42
ATOM  10861  CD1  TRP  1618     40.446  -6.348   9.745  1.00 20.31
ATOM  10862  NE1  TRP  1618     39.205  -5.845   9.423  1.00 19.55
ATOM  10863  CZ2  TRP  1618     37.054  -5.557  10.690  1.00 17.13
ATOM  10864  CZ3  TRP  1618     37.214  -6.345  12.977  1.00 18.71
ATOM  10865  CH2  TRP  1618     36.482  -5.771  11.915  1.00 19.07
ATOM  10866  C    TRP  1618     40.544  -9.619  11.787  1.00 20.59
ATOM  10867  O    TRP  1618     40.136  -9.746  12.938  1.00 18.49
ATOM  10868  N    LEU  1619     39.917 -10.144  10.737  1.00 21.43
ATOM  10869  CA   LEU  1619     38.668 -10.886  10.893  1.00 20.49
ATOM  10870  CB   LEU  1619     37.751 -10.622   9.696  1.00 20.97
ATOM  10871  CG   LEU  1619     37.106  -9.238   9.620  1.00 21.93
ATOM  10872  CD1  LEU  1619     36.316  -9.117   8.338  1.00 22.24
ATOM  10873  CD2  LEU  1619     36.200  -9.039  10.833  1.00 23.75
ATOM  10874  C    LEU  1619     38.817 -12.395  11.067  1.00 19.39
ATOM  10875  O    LEU  1619     37.821 -13.094  11.238  1.00 16.11
ATOM  10876  N    VAL  1620     40.047 -12.899  11.034  1.00 18.75
ATOM  10877  CA   VAL  1620     40.284 -14.334  11.174  1.00 18.47
ATOM  10878  CB   VAL  1620     41.798 -14.645  11.309  1.00 20.23
ATOM  10879  CG1  VAL  1620     42.007 -16.107  11.660  1.00 20.87
ATOM  10880  CG2  VAL  1620     42.505 -14.331  10.003  1.00 22.98
ATOM  10881  C    VAL  1620     39.553 -14.972  12.349  1.00 18.83
ATOM  10882  O    VAL  1620     38.847 -15.965  12.173  1.00 18.24
ATOM  10883  N    GLU  1621     39.731 -14.411  13.543  1.00 18.17
ATOM  10884  CA   GLU  1621     39.088 -14.946  14.741  1.00 18.85
ATOM  10885  CB   GLU  1621     39.479 -14.109  15.969  1.00 18.97
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ATOM   10886  CG   GLU  1621      38.815 -14.561  17.256  1.00 22.60
ATOM   10887  CD   GLU  1621      39.265 -13.760  18.471  1.00 25.26
ATOM   10888  OE1  GLU  1621      39.153 -12.515  18.453  1.00 24.17
ATOM   10889  OE2  GLU  1621      39.730 -14.383  19.446  1.00 28.44
ATOM   10890  C    GLU  1621      37.571 -14.962  14.599  1.00 16.87
ATOM   10891  O    GLU  1621      36.915 -15.951  14.909  1.00 16.16
ATOM   10892  N    THR  1622      37.023 -13.855  14.118  1.00 17.23
ATOM   10893  CA   THR  1622      35.583 -13.729  13.938  1.00 15.12
ATOM   10894  CB   THR  1622      35.238 -12.319  13.420  1.00 16.38
ATOM   10895  OG1  THR  1622      35.730 -11.345  14.356  1.00 17.00
ATOM   10896  CG2  THR  1622      33.727 -12.140  13.272  1.00 14.48
ATOM   10897  C    THR  1622      35.048 -14.797  12.985  1.00 15.13
ATOM   10898  O    THR  1622      34.064 -15.464  13.293  1.00 13.37
ATOM   10899  N    VAL  1623      35.696 -14.963  11.832  1.00 13.92
ATOM   10900  CA   VAL  1623      35.258 -15.969  10.862  1.00 14.72
ATOM   10901  CB   VAL  1623      36.102 -15.907   9.569  1.00 14.99
ATOM   10902  CG1  VAL  1623      35.676 -17.017   8.602  1.00 16.56
ATOM   10903  CG2  VAL  1623      35.936 -14.548   8.921  1.00 14.47
ATOM   10904  C    VAL  1623      35.345 -17.382  11.452  1.00 15.17
ATOM   10905  O    VAL  1623      34.424 -18.186  11.308  1.00 13.99
ATOM   10906  N    GLN  1624      36.456 -17.680  12.118  1.00 14.83
ATOM   10907  CA   GLN  1624      36.641 -18.992  12.729  1.00 17.43
ATOM   10908  CB   GLN  1624      38.012 -19.073  13.415  1.00 20.41
ATOM   10909  CG   GLN  1624      39.205 -18.806  12.499  1.00 28.20
ATOM   10910  CD   GLN  1624      40.540 -18.963  13.210  1.00 31.26
ATOM   10911  OE1  GLN  1624      40.789 -18.329  14.238  1.00 33.11
ATOM   10912  NE2  GLN  1624      41.408 -19.809  12.661  1.00 32.88
ATOM   10913  C    GLN  1624      35.544 -19.296  13.755  1.00 15.38
ATOM   10914  O    GLN  1624      34.966 -20.384  13.757  1.00 15.85
ATOM   10915  N    MET  1625      35.266 -18.334  14.632  1.00 16.26
ATOM   10916  CA   MET  1625      34.249 -18.528  15.664  1.00 14.73
ATOM   10917  CB   MET  1625      34.398 -17.466  16.758  1.00 15.61
ATOM   10918  CG   MET  1625      35.637 -17.671  17.623  1.00 18.12
ATOM   10919  SD   MET  1625      35.862 -16.357  18.837  1.00 20.56
ATOM   10920  CE   MET  1625      34.733 -16.876  20.128  1.00 24.48
ATOM   10921  C    MET  1625      32.832 -18.534  15.104  1.00 15.23
ATOM   10922  O    MET  1625      31.976 -19.288  15.571  1.00 15.05
ATOM   10923  N    LEU  1626      32.572 -17.702  14.101  1.00 16.96
ATOM   10924  CA   LEU  1626      31.240 -17.694  13.504  1.00 15.20
ATOM   10925  CB   LEU  1626      31.139 -16.617  12.416  1.00 15.28
ATOM   10926  CG   LEU  1626      30.816 -15.209  12.916  1.00 12.23
ATOM   10927  CD1  LEU  1626      30.993 -14.196  11.790  1.00 12.86
ATOM   10928  CD2  LEU  1626      29.398 -15.188  13.455  1.00 11.50
ATOM   10929  C    LEU  1626      30.947 -19.065  12.900  1.00 16.67
ATOM   10930  O    LEU  1626      29.905 -19.679  13.161  1.00 16.01
ATOM   10931  N    THR  1627      31.887 -19.548  12.098  1.00 16.42
ATOM   10932  CA   THR  1627      31.743 -20.833  11.423  1.00 19.44
ATOM   10933  CB   THR  1627      33.000 -21.152  10.592  1.00 20.87
ATOM   10934  OG1  THR  1627      33.259 -20.061   9.698  1.00 22.73
ATOM   10935  CG2  THR  1627      32.790 -22.424   9.770  1.00 26.46
ATOM   10936  C    THR  1627      31.481 -21.983  12.382  1.00 18.98
ATOM   10937  O    THR  1627      30.573 -22.782  12.168  1.00 20.35
ATOM   10938  N    GLU  1628      32.267 -22.072  13.446  1.00 20.15
ATOM   10939  CA   GLU  1628      32.053 -23.160  14.378  1.00 21.96
ATOM   10940  CB   GLU  1628      33.257 -23.296  15.313  1.00 25.32
ATOM   10941  CG   GLU  1628      33.231 -22.418  16.525  1.00 28.20
ATOM   10942  CD   GLU  1628      34.458 -22.615  17.394  1.00 27.97
ATOM   10943  OE1  GLU  1628      34.989 -23.748  17.440  1.00 27.80
ATOM   10944  OE2  GLU  1628      34.884 -21.638  18.039  1.00 28.14
ATOM   10945  C    GLU  1628      30.737 -22.990  15.155  1.00 21.32
ATOM   10946  O    GLU  1628      30.278 -23.924  15.807  1.00 21.40
ATOM   10947  N    ARG  1629      30.127 -21.806  15.073  1.00 18.90
ATOM   10948  CA   ARG  1629      28.850 -21.555  15.739  1.00 18.94
ATOM   10949  CB   ARG  1629      28.877 -20.193  16.455  1.00 19.15
ATOM   10950  CG   ARG  1629      29.636 -20.242  17.778  1.00 15.98
ATOM   10951  CD   ARG  1629      30.159 -18.882  18.246  1.00 12.70
ATOM   10952  NE   ARG  1629      30.954 -19.047  19.460  1.00 13.17
ATOM   10953  CZ   ARG  1629      32.154 -19.616  19.498  1.00 12.49
ATOM   10954  NH1  ARG  1629      32.719 -20.068  18.382  1.00 14.22
ATOM   10955  NH2  ARG  1629      32.778 -19.774  20.658  1.00 15.37
ATOM   10956  C    ARG  1629      27.659 -21.633  14.768  1.00 19.42
ATOM   10957  O    ARG  1629      26.610 -21.029  15.006  1.00 21.03
ATOM   10958  N    ALA  1630      27.838 -22.373  13.671  1.00 19.16
ATOM   10959  CA   ALA  1630      26.792 -22.591  12.663  1.00 17.42
ATOM   10960  CB   ALA  1630      25.493 -23.018  13.346  1.00 15.89
ATOM   10961  C    ALA  1630      26.503 -21.444  11.698  1.00 16.92
ATOM   10962  O    ALA  1630      25.460 -21.433  11.052  1.00 15.55
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ATOM	10963	N	VAL	1631	27.412	-20.484	11.590	1.00	16.60
ATOM	10964	CA	VAL	1631	27.194	-19.369	10.685	1.00	15.88
ATOM	10965	CB	VAL	1631	27.282	-18.019	11.436	1.00	17.04
ATOM	10966	CG1	VAL	1631	26.996	-16.863	10.477	1.00	15.90
ATOM	10967	CG2	VAL	1631	26.280	-17.994	12.590	1.00	18.38
ATOM	10968	C	VAL	1631	28.200	-19.357	9.534	1.00	15.71
ATOM	10969	O	VAL	1631	29.375	-19.046	9.728	1.00	17.57
ATOM	10970	N	PRO	1632	27.760	-19.725	8.318	1.00	16.10
ATOM	10971	CD	PRO	1632	26.468	-20.292	7.901	1.00	14.50
ATOM	10972	CA	PRO	1632	28.710	-19.706	7.200	1.00	15.24
ATOM	10973	CB	PRO	1632	27.961	-20.438	6.083	1.00	15.98
ATOM	10974	CG	PRO	1632	26.552	-20.188	6.393	1.00	20.78
ATOM	10975	C	PRO	1632	29.025	-18.255	6.857	1.00	16.57
ATOM	10976	O	PRO	1632	28.156	-17.380	6.933	1.00	15.01
ATOM	10977	N	VAL	1633	30.269	-18.003	6.478	1.00	14.68
ATOM	10978	CA	VAL	1633	30.703	-16.654	6.174	1.00	14.60
ATOM	10979	CB	VAL	1633	31.808	-16.213	7.157	1.00	16.39
ATOM	10980	CG1	VAL	1633	32.210	-14.773	6.874	1.00	16.35
ATOM	10981	CG2	VAL	1633	31.320	-16.371	8.593	1.00	15.41
ATOM	10982	C	VAL	1633	31.237	-16.462	4.770	1.00	14.92
ATOM	10983	O	VAL	1633	31.952	-17.311	4.234	1.00	14.86
ATOM	10984	N	CYS	1634	30.875	-15.332	4.180	1.00	13.16
ATOM	10985	CA	CYS	1634	31.352	-14.972	2.855	1.00	15.22
ATOM	10986	CB	CYS	1634	30.186	-14.545	1.955	1.00	14.14
ATOM	10987	SG	CYS	1634	30.713	-13.922	0.336	1.00	17.65
ATOM	10988	C	CYS	1634	32.277	-13.794	3.132	1.00	14.44
ATOM	10989	O	CYS	1634	31.929	-12.892	3.887	1.00	15.27
ATOM	10990	N	GLY	1635	33.471	-13.816	2.558	1.00	15.52
ATOM	10991	CA	GLY	1635	34.400	-12.723	2.779	1.00	14.14
ATOM	10992	C	GLY	1635	34.162	-11.615	1.771	1.00	15.47
ATOM	10993	O	GLY	1635	33.352	-11.776	0.866	1.00	16.16
ATOM	10994	N	HIS	1636	34.867	-10.498	1.918	1.00	16.26
ATOM	10995	CA	HIS	1636	34.709	-9.364	1.009	1.00	18.95
ATOM	10996	CB	HIS	1636	33.468	-8.553	1.413	1.00	19.60
ATOM	10997	CG	HIS	1636	33.099	-7.460	0.456	1.00	20.41
ATOM	10998	CD2	HIS	1636	33.752	-6.934	-0.607	1.00	20.13
ATOM	10999	ND1	HIS	1636	31.917	-6.757	0.561	1.00	20.81
ATOM	11000	CE1	HIS	1636	31.858	-5.847	-0.393	1.00	20.55
ATOM	11001	NE2	HIS	1636	32.960	-5.933	-1.116	1.00	20.46
ATOM	11002	C	HIS	1636	35.959	-8.491	1.073	1.00	21.06
ATOM	11003	O	HIS	1636	36.171	-7.769	2.050	1.00	23.03
ATOM	11004	N	LEU	1637	36.783	-8.571	0.030	1.00	22.97
ATOM	11005	CA	LEU	1637	38.028	-7.804	-0.050	1.00	24.89
ATOM	11006	CB	LEU	1637	39.227	-8.755	-0.153	1.00	24.90
ATOM	11007	CG	LEU	1637	39.479	-9.659	1.057	1.00	26.13
ATOM	11008	CD1	LEU	1637	40.618	-10.621	0.773	1.00	24.93
ATOM	11009	CD2	LEU	1637	39.804	-8.798	2.267	1.00	26.07
ATOM	11010	C	LEU	1637	38.026	-6.854	-1.243	1.00	26.65
ATOM	11011	O	LEU	1637	37.199	-6.978	-2.147	1.00	24.18
ATOM	11012	N	GLY	1638	38.962	-5.909	-1.234	1.00	28.25
ATOM	11013	CA	GLY	1638	39.063	-4.941	-2.309	1.00	28.56
ATOM	11014	C	GLY	1638	38.402	-3.634	-1.928	1.00	29.01
ATOM	11015	O	GLY	1638	38.664	-3.081	-0.858	1.00	29.30
ATOM	11016	N	LEU	1639	37.537	-3.141	-2.805	1.00	28.17
ATOM	11017	CA	LEU	1639	36.824	-1.898	-2.566	1.00	27.72
ATOM	11018	CB	LEU	1639	36.311	-1.348	-3.899	1.00	29.18
ATOM	11019	CG	LEU	1639	36.026	0.153	-3.987	1.00	30.77
ATOM	11020	CD1	LEU	1639	35.697	0.527	-5.427	1.00	31.76
ATOM	11021	CD2	LEU	1639	34.890	0.522	-3.066	1.00	30.98
ATOM	11022	C	LEU	1639	35.657	-2.190	-1.620	1.00	28.43
ATOM	11023	O	LEU	1639	34.575	-2.581	-2.063	1.00	26.50
ATOM	11024	N	THR	1640	35.890	-2.013	-0.320	1.00	28.20
ATOM	11025	CA	THR	1640	34.866	-2.259	0.698	1.00	28.91
ATOM	11026	CB	THR	1640	35.482	-2.866	1.970	1.00	29.17
ATOM	11027	OG1	THR	1640	36.517	-2.006	2.462	1.00	30.62
ATOM	11028	CG2	THR	1640	36.068	-4.236	1.670	1.00	30.17
ATOM	11029	C	THR	1640	34.171	-0.951	1.057	1.00	28.17
ATOM	11030	O	THR	1640	34.667	-0.177	1.874	1.00	29.15
ATOM	11031	N	PRO	1641	32.991	-0.706	0.463	1.00	27.49
ATOM	11032	CD	PRO	1641	32.251	-1.695	-0.339	1.00	27.96
ATOM	11033	CA	PRO	1641	32.189	0.502	0.674	1.00	26.18
ATOM	11034	CB	PRO	1641	30.897	0.202	-0.092	1.00	26.35
ATOM	11035	CG	PRO	1641	30.832	-1.290	-0.098	1.00	29.35
ATOM	11036	C	PRO	1641	31.952	0.977	2.104	1.00	25.02
ATOM	11037	O	PRO	1641	31.763	2.174	2.332	1.00	24.64
ATOM	11038	N	GLN	1642	31.968	0.064	3.070	1.00	23.18
ATOM	11039	CA	GLN	1642	31.768	0.475	4.459	1.00	23.68

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ATOM   11040  CB   GLN   1642     31.661  -0.751   5.369  1.00 24.34
ATOM   11041  CG   GLN   1642     30.249  -1.307   5.471  1.00 22.71
ATOM   11042  CD   GLN   1642     30.192  -2.633   6.204  1.00 25.04
ATOM   11043  OE1  GLN   1642     31.017  -2.910   7.075  1.00 23.03
ATOM   11044  NE2  GLN   1642     29.204  -3.456   5.865  1.00 23.95
ATOM   11045  C    GLN   1642     32.922   1.367   4.911  1.00 24.23
ATOM   11046  O    GLN   1642     32.781   2.160   5.842  1.00 24.32
ATOM   11047  N    SER   1643     34.061   1.235   4.237  1.00 23.66
ATOM   11048  CA   SER   1643     35.246   2.028   4.559  1.00 24.17
ATOM   11049  CB   SER   1643     36.478   1.126   4.596  1.00 23.24
ATOM   11050  OG   SER   1643     36.342   0.116   5.570  1.00 21.44
ATOM   11051  C    SER   1643     35.474   3.157   3.556  1.00 25.48
ATOM   11052  O    SER   1643     36.602   3.618   3.368  1.00 24.46
ATOM   11053  N    VAL   1644     34.400   3.598   2.908  1.00 26.06
ATOM   11054  CA   VAL   1644     34.502   4.671   1.924  1.00 26.14
ATOM   11055  CB   VAL   1644     33.109   5.080   1.402  1.00 25.49
ATOM   11056  CG1  VAL   1644     32.258   5.623   2.541  1.00 26.03
ATOM   11057  CG2  VAL   1644     33.250   6.110   0.293  1.00 25.29
ATOM   11058  C    VAL   1644     35.209   5.905   2.501  1.00 27.56
ATOM   11059  O    VAL   1644     36.063   6.500   1.842  1.00 27.45
ATOM   11060  N    ASN   1645     34.866   6.282   3.732  1.00 27.89
ATOM   11061  CA   ASN   1645     35.480   7.452   4.359  1.00 28.29
ATOM   11062  CB   ASN   1645     34.779   7.776   5.682  1.00 27.21
ATOM   11063  CG   ASN   1645     33.331   8.190   5.486  1.00 25.74
ATOM   11064  OD1  ASN   1645     33.045   9.268   4.967  1.00 22.31
ATOM   11065  ND2  ASN   1645     32.408   7.321   5.888  1.00 25.99
ATOM   11066  C    ASN   1645     36.971   7.241   4.599  1.00 29.33
ATOM   11067  O    ASN   1645     37.735   8.205   4.676  1.00 29.64
ATOM   11068  N    ILE   1646     37.373   5.978   4.715  1.00 30.28
ATOM   11069  CA   ILE   1646     38.773   5.626   4.931  1.00 31.32
ATOM   11070  CB   ILE   1646     38.929   4.153   5.396  1.00 31.95
ATOM   11071  CG2  ILE   1646     40.399   3.752   5.377  1.00 31.20
ATOM   11072  CG1  ILE   1646     38.355   3.977   6.806  1.00 31.77
ATOM   11073  CD1  ILE   1646     39.071   4.789   7.862  1.00 31.01
ATOM   11074  C    ILE   1646     39.562   5.809   3.636  1.00 33.51
ATOM   11075  O    ILE   1646     40.655   6.377   3.644  1.00 34.28
ATOM   11076  N    PHE   1647     39.006   5.324   2.526  1.00 34.55
ATOM   11077  CA   PHE   1647     39.664   5.439   1.225  1.00 35.75
ATOM   11078  CB   PHE   1647     39.083   4.429   0.227  1.00 36.28
ATOM   11079  CG   PHE   1647     39.051   3.014   0.734  1.00 37.21
ATOM   11080  CD1  PHE   1647     40.183   2.435   1.300  1.00 37.15
ATOM   11081  CD2  PHE   1647     37.885   2.257   0.638  1.00 36.77
ATOM   11082  CE1  PHE   1647     40.154   1.120   1.763  1.00 38.58
ATOM   11083  CE2  PHE   1647     37.845   0.943   1.096  1.00 36.69
ATOM   11084  CZ   PHE   1647     38.981   0.373   1.661  1.00 38.01
ATOM   11085  C    PHE   1647     39.512   6.840   0.643  1.00 36.39
ATOM   11086  O    PHE   1647     40.280   7.243  -0.233  1.00 36.05
ATOM   11087  N    GLY   1648     38.518   7.577   1.130  1.00 36.62
ATOM   11088  CA   GLY   1648     38.279   8.919   0.630  1.00 38.30
ATOM   11089  C    GLY   1648     37.421   8.878  -0.622  1.00 40.02
ATOM   11090  O    GLY   1648     37.406   9.822  -1.413  1.00 40.07
ATOM   11091  N    GLY   1649     36.703   7.773  -0.796  1.00 40.99
ATOM   11092  CA   GLY   1649     35.846   7.609  -1.956  1.00 42.04
ATOM   11093  C    GLY   1649     35.898   6.184  -2.477  1.00 42.47
ATOM   11094  O    GLY   1649     36.534   5.324  -1.876  1.00 41.84
ATOM   11095  N    TYR   1650     35.229   5.927  -3.596  1.00 44.57
ATOM   11096  CA   TYR   1650     35.224   4.592  -4.178  1.00 45.61
ATOM   11097  CB   TYR   1650     33.839   4.258  -4.735  1.00 46.67
ATOM   11098  CG   TYR   1650     32.731   4.386  -3.713  1.00 48.02
ATOM   11099  CD1  TYR   1650     32.142   5.623  -3.448  1.00 47.87
ATOM   11100  CE1  TYR   1650     31.142   5.753  -2.487  1.00 48.46
ATOM   11101  CD2  TYR   1650     32.291   3.275  -2.988  1.00 48.35
ATOM   11102  CE2  TYR   1650     31.291   3.394  -2.021  1.00 48.79
ATOM   11103  CZ   TYR   1650     30.722   4.637  -1.777  1.00 48.77
ATOM   11104  OH   TYR   1650     29.735   4.767  -0.827  1.00 48.30
ATOM   11105  C    TYR   1650     36.272   4.498  -5.280  1.00 46.09
ATOM   11106  O    TYR   1650     35.975   4.697  -6.458  1.00 45.93
ATOM   11107  N    LYS   1651     37.503   4.195  -4.881  1.00 46.34
ATOM   11108  CA   LYS   1651     38.614   4.077  -5.815  1.00 46.77
ATOM   11109  CB   LYS   1651     39.805   4.890  -5.306  1.00 47.81
ATOM   11110  CG   LYS   1651     39.467   6.325  -4.935  1.00 49.04
ATOM   11111  CD   LYS   1651     40.686   7.053  -4.385  1.00 50.24
ATOM   11112  CE   LYS   1651     40.343   8.473  -3.962  1.00 51.45
ATOM   11113  NZ   LYS   1651     41.543   9.208  -3.468  1.00 53.01
ATOM   11114  C    LYS   1651     39.026   2.618  -5.982  1.00 46.53
ATOM   11115  O    LYS   1651     38.815   1.797  -5.087  1.00 46.02
ATOM   11116  N    VAL   1652     39.614   2.300  -7.131  1.00 46.03
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ATOM	11117	CA	VAL	1652	40.063	0.941	-7.409	1.00	45.48
ATOM	11118	CB	VAL	1652	40.715	0.838	-8.803	1.00	45.22
ATOM	11119	CG1	VAL	1652	41.216	-0.577	-9.039	1.00	45.09
ATOM	11120	CG2	VAL	1652	39.708	1.228	-9.874	1.00	44.78
ATOM	11121	C	VAL	1652	41.080	0.510	-6.360	1.00	45.62
ATOM	11122	O	VAL	1652	41.910	1.307	-5.921	1.00	44.90
ATOM	11123	N	GLN	1653	41.012	-0.755	-5.963	1.00	45.29
ATOM	11124	CA	GLN	1653	41.917	-1.286	-4.955	1.00	45.81
ATOM	11125	CB	GLN	1653	41.108	-1.795	-3.758	1.00	46.31
ATOM	11126	CG	GLN	1653	41.733	-1.510	-2.405	1.00	47.72
ATOM	11127	CD	GLN	1653	41.812	-0.025	-2.097	1.00	47.56
ATOM	11128	OE1	GLN	1653	40.805	0.683	-2.129	1.00	47.95
ATOM	11129	NE2	GLN	1653	43.011	0.451	-1.790	1.00	49.46
ATOM	11130	C	GLN	1653	42.745	-2.422	-5.549	1.00	45.65
ATOM	11131	O	GLN	1653	42.340	-3.046	-6.529	1.00	45.37
ATOM	11132	N	GLY	1654	43.907	-2.686	-4.957	1.00	45.93
ATOM	11133	CA	GLY	1654	44.758	-3.753	-5.456	1.00	46.97
ATOM	11134	C	GLY	1654	45.912	-3.277	-6.324	1.00	47.53
ATOM	11135	O	GLY	1654	46.917	-3.974	-6.457	1.00	46.50
ATOM	11136	N	ARG	1655	45.763	-2.096	-6.920	1.00	48.61
ATOM	11137	CA	ARG	1655	46.793	-1.511	-7.778	1.00	49.79
ATOM	11138	CB	ARG	1655	46.421	-0.067	-8.141	1.00	50.69
ATOM	11139	CG	ARG	1655	45.152	0.090	-8.980	1.00	51.67
ATOM	11140	CD	ARG	1655	45.449	0.007	-10.469	1.00	52.58
ATOM	11141	NE	ARG	1655	44.245	0.096	-11.297	1.00	52.70
ATOM	11142	CZ	ARG	1655	43.421	1.141	-11.329	1.00	52.20
ATOM	11143	NH1	ARG	1655	43.658	2.205	-10.574	1.00	52.02
ATOM	11144	NH2	ARG	1655	42.360	1.124	-12.125	1.00	51.43
ATOM	11145	C	ARG	1655	48.146	-1.512	-7.071	1.00	50.62
ATOM	11146	O	ARG	1655	48.328	-0.826	-6.065	1.00	50.32
ATOM	11147	N	GLY	1656	49.093	-2.282	-7.597	1.00	51.16
ATOM	11148	CA	GLY	1656	50.410	-2.339	-6.989	1.00	52.70
ATOM	11149	C	GLY	1656	50.786	-3.730	-6.522	1.00	53.14
ATOM	11150	O	GLY	1656	49.959	-4.640	-6.528	1.00	53.30
ATOM	11151	N	ASP	1657	52.041	-3.898	-6.119	1.00	53.65
ATOM	11152	CA	ASP	1657	52.523	-5.190	-5.649	1.00	53.80
ATOM	11153	CB	ASP	1657	54.034	-5.308	-5.870	1.00	55.47
ATOM	11154	CG	ASP	1657	54.406	-5.377	-7.340	1.00	56.62
ATOM	11155	OD1	ASP	1657	53.962	-6.327	-8.022	1.00	56.60
ATOM	11156	OD2	ASP	1657	55.144	-4.484	-7.812	1.00	57.58
ATOM	11157	C	ASP	1657	52.204	-5.392	-4.173	1.00	53.09
ATOM	11158	O	ASP	1657	51.620	-6.404	-3.793	1.00	52.84
ATOM	11159	N	GLU	1658	52.586	-4.424	-3.347	1.00	52.53
ATOM	11160	CA	GLU	1658	52.340	-4.507	-1.912	1.00	52.30
ATOM	11161	CB	GLU	1658	52.820	-3.232	-1.214	1.00	53.11
ATOM	11162	CG	GLU	1658	52.733	-3.294	0.306	1.00	54.62
ATOM	11163	CD	GLU	1658	53.180	-2.007	0.973	1.00	55.75
ATOM	11164	OE1	GLU	1658	54.319	-1.562	0.708	1.00	56.22
ATOM	11165	OE2	GLU	1658	52.393	-1.443	1.768	1.00	55.93
ATOM	11166	C	GLU	1658	50.859	-4.722	-1.616	1.00	51.14
ATOM	11167	O	GLU	1658	50.491	-5.640	-0.882	1.00	50.90
ATOM	11168	N	ALA	1659	50.015	-3.870	-2.190	1.00	49.84
ATOM	11169	CA	ALA	1659	48.573	-3.969	-1.990	1.00	47.95
ATOM	11170	CB	ALA	1659	47.869	-2.804	-2.675	1.00	48.45
ATOM	11171	C	ALA	1659	48.048	-5.293	-2.535	1.00	46.33
ATOM	11172	O	ALA	1659	47.280	-5.987	-1.869	1.00	46.58
ATOM	11173	N	GLY	1660	48.470	-5.635	-3.748	1.00	44.15
ATOM	11174	CA	GLY	1660	48.035	-6.874	-4.363	1.00	41.45
ATOM	11175	C	GLY	1660	48.372	-8.095	-3.529	1.00	40.33
ATOM	11176	O	GLY	1660	47.507	-8.925	-3.260	1.00	38.67
ATOM	11177	N	ASP	1661	49.630	-8.209	-3.114	1.00	39.99
ATOM	11178	CA	ASP	1661	50.055	-9.348	-2.312	1.00	39.26
ATOM	11179	CB	ASP	1661	51.563	-9.293	-2.058	1.00	42.10
ATOM	11180	CG	ASP	1661	52.368	-9.258	-3.340	1.00	42.83
ATOM	11181	OD1	ASP	1661	52.150	-10.129	-4.208	1.00	42.87
ATOM	11182	OD2	ASP	1661	53.223	-8.360	-3.477	1.00	45.93
ATOM	11183	C	ASP	1661	49.317	-9.386	-0.982	1.00	38.30
ATOM	11184	O	ASP	1661	49.029	-10.460	-0.455	1.00	36.90
ATOM	11185	N	GLN	1662	49.014	-8.211	-0.442	1.00	37.31
ATOM	11186	CA	GLN	1662	48.306	-8.124	0.829	1.00	37.91
ATOM	11187	CB	GLN	1662	48.299	-6.678	1.336	1.00	39.32
ATOM	11188	CG	GLN	1662	47.557	-6.500	2.647	1.00	42.13
ATOM	11189	CD	GLN	1662	47.934	-7.555	3.671	1.00	43.63
ATOM	11190	OE1	GLN	1662	49.108	-7.733	3.993	1.00	44.57
ATOM	11191	NE2	GLN	1662	46.937	-8.261	4.186	1.00	45.08
ATOM	11192	C	GLN	1662	46.872	-8.631	0.694	1.00	36.59
ATOM	11193	O	GLN	1662	46.316	-9.209	1.632	1.00	35.25

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ATOM   11194  N   LEU  1663     46.278  -8.408  -0.474  1.00 36.15
ATOM   11195  CA  LEU  1663     44.911  -8.851  -0.730  1.00 35.64
ATOM   11196  CB  LEU  1663     44.359  -8.190  -1.999  1.00 37.34
ATOM   11197  CG  LEU  1663     44.061  -6.686  -1.919  1.00 39.82
ATOM   11198  CD1 LEU  1663     43.626  -6.168  -3.283  1.00 40.42
ATOM   11199  CD2 LEU  1663     42.971  -6.434  -0.884  1.00 40.78
ATOM   11200  C   LEU  1663     44.880 -10.367  -0.875  1.00 33.87
ATOM   11201  O   LEU  1663     43.997 -11.030  -0.333  1.00 33.09
ATOM   11202  N   LEU  1664     45.850 -10.912  -1.604  1.00 31.69
ATOM   11203  CA  LEU  1664     45.933 -12.353  -1.808  1.00 30.95
ATOM   11204  CB  LEU  1664     47.102 -12.690  -2.736  1.00 34.05
ATOM   11205  CG  LEU  1664     46.949 -13.905  -3.655  1.00 35.86
ATOM   11206  CD1 LEU  1664     48.242 -14.089  -4.444  1.00 37.45
ATOM   11207  CD2 LEU  1664     46.639 -15.155  -2.853  1.00 36.48
ATOM   11208  C   LEU  1664     46.141 -13.026  -0.454  1.00 29.09
ATOM   11209  O   LEU  1664     45.610 -14.107  -0.190  1.00 28.40
ATOM   11210  N   SER  1665     46.921 -12.375   0.403  1.00 26.84
ATOM   11211  CA  SER  1665     47.192 -12.897   1.733  1.00 25.84
ATOM   11212  CB  SER  1665     48.222 -12.017   2.447  1.00 26.63
ATOM   11213  OG  SER  1665     48.565 -12.558   3.713  1.00 28.52
ATOM   11214  C   SER  1665     45.892 -12.931   2.533  1.00 24.57
ATOM   11215  O   SER  1665     45.552 -13.949   3.132  1.00 23.68
ATOM   11216  N   ASP  1666     45.166 -11.815   2.532  1.00 24.47
ATOM   11217  CA  ASP  1666     43.901 -11.738   3.258  1.00 25.90
ATOM   11218  CB  ASP  1666     43.296 -10.328   3.170  1.00 25.16
ATOM   11219  CG  ASP  1666     44.089  -9.296   3.957  1.00 27.13
ATOM   11220  OD1 ASP  1666     44.664  -9.652   5.009  1.00 26.45
ATOM   11221  OD2 ASP  1666     44.130  -8.117   3.534  1.00 27.04
ATOM   11222  C   ASP  1666     42.913 -12.759   2.714  1.00 25.78
ATOM   11223  O   ASP  1666     42.168 -13.382   3.473  1.00 27.18
ATOM   11224  N   ALA  1667     42.910 -12.936   1.397  1.00 25.37
ATOM   11225  CA  ALA  1667     42.013 -13.893   0.765  1.00 24.67
ATOM   11226  CB  ALA  1667     42.187 -13.849  -0.754  1.00 24.78
ATOM   11227  C   ALA  1667     42.297 -15.294   1.287  1.00 24.19
ATOM   11228  O   ALA  1667     41.382 -16.026   1.673  1.00 22.33
ATOM   11229  N   LEU  1668     43.570 -15.673   1.303  1.00 23.07
ATOM   11230  CA  LEU  1668     43.951 -16.996   1.792  1.00 22.47
ATOM   11231  CB  LEU  1668     45.434 -17.256   1.506  1.00 23.09
ATOM   11232  CG  LEU  1668     45.767 -17.598   0.047  1.00 23.46
ATOM   11233  CD1 LEU  1668     47.259 -17.456  -0.188  1.00 24.35
ATOM   11234  CD2 LEU  1668     45.297 -19.006  -0.278  1.00 23.63
ATOM   11235  C   LEU  1668     43.676 -17.140   3.288  1.00 22.33
ATOM   11236  O   LEU  1668     43.296 -18.211   3.751  1.00 22.16
ATOM   11237  N   ALA  1669     43.877 -16.059   4.038  1.00 22.43
ATOM   11238  CA  ALA  1669     43.633 -16.083   5.479  1.00 22.18
ATOM   11239  CB  ALA  1669     44.086 -14.782   6.111  1.00 23.50
ATOM   11240  C   ALA  1669     42.153 -16.328   5.775  1.00 21.87
ATOM   11241  O   ALA  1669     41.809 -17.177   6.600  1.00 22.22
ATOM   11242  N   LEU  1670     41.284 -15.585   5.098  1.00 20.26
ATOM   11243  CA  LEU  1670     39.846 -15.730   5.288  1.00 18.56
ATOM   11244  CB  LEU  1670     39.085 -14.737   4.401  1.00 19.24
ATOM   11245  CG  LEU  1670     39.265 -13.260   4.755  1.00 18.45
ATOM   11246  CD1 LEU  1670     38.703 -12.375   3.662  1.00 19.75
ATOM   11247  CD2 LEU  1670     38.569 -12.973   6.086  1.00 19.43
ATOM   11248  C   LEU  1670     39.405 -17.146   4.962  1.00 19.70
ATOM   11249  O   LEU  1670     38.571 -17.714   5.659  1.00 18.51
ATOM   11250  N   GLU  1671     39.963 -17.720   3.901  1.00 18.99
ATOM   11251  CA  GLU  1671     39.603 -19.079   3.518  1.00 19.04
ATOM   11252  CB  GLU  1671     40.303 -19.474   2.215  1.00 19.59
ATOM   11253  CG  GLU  1671     40.072 -20.929   1.816  1.00 22.01
ATOM   11254  CD  GLU  1671     40.790 -21.305   0.530  1.00 24.31
ATOM   11255  OE1 GLU  1671     42.015 -21.096   0.458  1.00 23.91
ATOM   11256  OE2 GLU  1671     40.128 -21.804  -0.398  1.00 27.07
ATOM   11257  C   GLU  1671     39.978 -20.070   4.616  1.00 18.25
ATOM   11258  O   GLU  1671     39.164 -20.901   5.016  1.00 17.58
ATOM   11259  N   ALA  1672     41.217 -19.985   5.095  1.00 19.38
ATOM   11260  CA  ALA  1672     41.688 -20.879   6.148  1.00 20.20
ATOM   11261  CB  ALA  1672     43.164 -20.623   6.434  1.00 21.78
ATOM   11262  C   ALA  1672     40.870 -20.710   7.429  1.00 21.55
ATOM   11263  O   ALA  1672     40.684 -21.664   8.192  1.00 21.04
ATOM   11264  N   ALA  1673     40.382 -19.492   7.654  1.00 19.63
ATOM   11265  CA  ALA  1673     39.575 -19.175   8.831  1.00 19.73
ATOM   11266  CB  ALA  1673     39.398 -17.665   8.952  1.00 18.51
ATOM   11267  C   ALA  1673     38.212 -19.857   8.782  1.00 20.99
ATOM   11268  O   ALA  1673     37.545 -20.010   9.807  1.00 19.73
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ATOM   11270  CA  GLY  1674     36.510 -20.928   7.453  1.00 19.89
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ATOM  11272  O    GLY  1674    34.468 -20.848   6.245  1.00 18.23
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ATOM  11277  O    ALA  1675    35.772 -20.194   3.175  1.00 22.86
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ATOM  11279  CA   GLN  1676    33.194 -20.659   2.208  1.00 20.46
ATOM  11280  CB   GLN  1676    31.923 -21.426   2.578  1.00 21.87
ATOM  11281  CG   GLN  1676    32.049 -22.250   3.854  1.00 23.52
ATOM  11282  CD   GLN  1676    30.805 -23.067   4.165  1.00 26.30
ATOM  11283  OE1  GLN  1676    30.470 -24.007   3.449  1.00 30.08
ATOM  11284  NE2  GLN  1676    30.116 -22.707   5.240  1.00 28.15
ATOM  11285  C    GLN  1676    32.982 -19.938   0.879  1.00 19.59
ATOM  11286  O    GLN  1676    32.822 -20.572  -0.163  1.00 20.05
ATOM  11287  N    LEU  1677    32.973 -18.612   0.928  1.00 20.26
ATOM  11288  CA   LEU  1677    32.797 -17.792  -0.257  1.00 20.79
ATOM  11289  CB   LEU  1677    31.314 -17.476  -0.467  1.00 22.99
ATOM  11290  CG   LEU  1677    30.499 -18.528  -1.225  1.00 25.39
ATOM  11291  CD1  LEU  1677    29.007 -18.325  -0.979  1.00 26.62
ATOM  11292  CD2  LEU  1677    30.821 -18.426  -2.711  1.00 25.79
ATOM  11293  C    LEU  1677    33.570 -16.496  -0.092  1.00 21.45
ATOM  11294  O    LEU  1677    33.826 -16.058   1.030  1.00 20.88
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ATOM  11296  CA   LEU  1678    34.675 -14.617  -1.168  1.00 20.03
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ATOM  11302  O    LEU  1678    34.090 -14.119  -3.432  1.00 20.80
ATOM  11303  N    VAL  1679    34.026 -12.433  -1.947  1.00 19.50
ATOM  11304  CA   VAL  1679    33.639 -11.435  -2.929  1.00 20.39
ATOM  11305  CB   VAL  1679    32.395 -10.630  -2.476  1.00 18.97
ATOM  11306  CG1  VAL  1679    32.202  -9.423  -3.389  1.00 19.05
ATOM  11307  CG2  VAL  1679    31.145 -11.517  -2.518  1.00 17.14
ATOM  11308  C    VAL  1679    34.799 -10.462  -3.121  1.00 22.00
ATOM  11309  O    VAL  1679    35.351  -9.935  -2.145  1.00 20.40
ATOM  11310  N    LEU  1680    35.174 -10.249  -4.380  1.00 22.33
ATOM  11311  CA   LEU  1680    36.250  -9.325  -4.745  1.00 24.09
ATOM  11312  CB   LEU  1680    37.267 -10.011  -5.666  1.00 25.86
ATOM  11313  CG   LEU  1680    38.561 -10.510  -5.030  1.00 28.75
ATOM  11314  CD1  LEU  1680    39.434 -11.167  -6.092  1.00 28.15
ATOM  11315  CD2  LEU  1680    39.295  -9.338  -4.388  1.00 28.06
ATOM  11316  C    LEU  1680    35.631  -8.147  -5.483  1.00 23.79
ATOM  11317  O    LEU  1680    34.984  -8.338  -6.508  1.00 26.35
ATOM  11318  N    GLU  1681    35.829  -6.934  -4.976  1.00 23.88
ATOM  11319  CA   GLU  1681    35.252  -5.753  -5.613  1.00 26.33
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ATOM  11323  OE1  GLU  1681    32.420  -3.717  -3.125  1.00 26.14
ATOM  11324  OE2  GLU  1681    31.820  -2.386  -4.760  1.00 27.76
ATOM  11325  C    GLU  1681    36.272  -4.742  -6.137  1.00 27.77
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ATOM  11327  N    CYS  1682    36.107  -4.354  -7.399  1.00 29.09
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ATOM  11329  CB   CYS  1682    36.562  -1.968  -7.639  1.00 30.60
ATOM  11330  SG   CYS  1682    34.887  -1.555  -8.174  1.00 32.38
ATOM  11331  C    CYS  1682    38.463  -3.582  -7.760  1.00 31.19
ATOM  11332  O    CYS  1682    39.075  -2.841  -6.984  1.00 32.08
ATOM  11333  N    VAL  1683    39.029  -4.593  -8.405  1.00 31.35
ATOM  11334  CA   VAL  1683    40.436  -4.922  -8.248  1.00 32.78
ATOM  11335  CB   VAL  1683    40.600  -6.146  -7.312  1.00 33.52
ATOM  11336  CG1  VAL  1683    40.443  -7.443  -8.094  1.00 33.50
ATOM  11337  CG2  VAL  1683    41.927  -6.085  -6.596  1.00 34.74
ATOM  11338  C    VAL  1683    40.971  -5.249  -9.645  1.00 33.45
ATOM  11339  O    VAL  1683    40.218  -5.684 -10.516  1.00 33.44
ATOM  11340  N    PRO  1684    42.274  -5.024  -9.887  1.00 33.91
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ATOM  11342  CA   PRO  1684    42.817  -5.330 -11.216  1.00 33.77
ATOM  11343  CB   PRO  1684    44.307  -5.011 -11.066  1.00 34.17
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ATOM  11347  N    VAL  1685    42.043  -6.987 -12.802  1.00 33.35
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ATOM  11350  CG1 VAL  1685    40.993  -9.650 -15.296  1.00 33.59
ATOM  11351  CG2 VAL  1685    40.601  -7.175 -15.216  1.00 32.41
ATOM  11352  C   VAL  1685    42.817  -9.343 -12.976  1.00 34.90
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ATOM  11355  CA  GLU  1686    45.185  -9.893 -13.024  1.00 37.45
ATOM  11356  CB  GLU  1686    46.512  -9.245 -13.449  1.00 40.77
ATOM  11357  CG  GLU  1686    46.516  -7.719 -13.470  1.00 45.35
ATOM  11358  CD  GLU  1686    45.716  -7.144 -14.631  1.00 47.26
ATOM  11359  OE1 GLU  1686    45.988  -7.521 -15.793  1.00 48.37
ATOM  11360  OE2 GLU  1686    44.820  -6.310 -14.383  1.00 49.33
ATOM  11361  C   GLU  1686    45.259 -10.326 -11.565  1.00 35.59
ATOM  11362  O   GLU  1686    45.636 -11.460 -11.269  1.00 35.39
ATOM  11363  N   LEU  1687    44.896  -9.427 -10.656  1.00 34.93
ATOM  11364  CA  LEU  1687    44.926  -9.743  -9.234  1.00 34.56
ATOM  11365  CB  LEU  1687    44.773  -8.473  -8.400  1.00 36.48
ATOM  11366  CG  LEU  1687    45.413  -8.477  -7.007  1.00 38.23
ATOM  11367  CD1 LEU  1687    45.086  -7.168  -6.311  1.00 39.44
ATOM  11368  CD2 LEU  1687    44.909  -9.646  -6.189  1.00 40.16
ATOM  11369  C   LEU  1687    43.783 -10.706  -8.934  1.00 33.56
ATOM  11370  O   LEU  1687    43.940 -11.656  -8.166  1.00 33.33
ATOM  11371  N   ALA  1688    42.633 -10.455  -9.552  1.00 33.02
ATOM  11372  CA  ALA  1688    41.462 -11.303  -9.374  1.00 32.03
ATOM  11373  CB  ALA  1688    40.285 -10.748 -10.174  1.00 31.82
ATOM  11374  C   ALA  1688    41.798 -12.713  -9.841  1.00 31.88
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ATOM  11376  N   LYS  1689    42.642 -12.799 -10.865  1.00 32.10
ATOM  11377  CA  LYS  1689    43.065 -14.080 -11.420  1.00 32.59
ATOM  11378  CB  LYS  1689    43.921 -13.852 -12.667  1.00 35.33
ATOM  11379  CG  LYS  1689    43.301 -12.915 -13.688  1.00 39.20
ATOM  11380  CD  LYS  1689    44.230 -12.702 -14.875  1.00 43.71
ATOM  11381  CE  LYS  1689    43.639 -11.725 -15.875  1.00 44.72
ATOM  11382  NZ  LYS  1689    44.550 -11.492 -17.027  1.00 46.98
ATOM  11383  C   LYS  1689    43.877 -14.854 -10.392  1.00 30.77
ATOM  11384  O   LYS  1689    43.635 -16.040 -10.158  1.00 30.60
ATOM  11385  N   ARG  1690    44.850 -14.172  -9.793  1.00 30.36
ATOM  11386  CA  ARG  1690    45.715 -14.773  -8.782  1.00 30.78
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ATOM  11388  CG  ARG  1690    48.153 -13.968  -8.653  1.00 35.21
ATOM  11389  CD  ARG  1690    49.122 -13.194  -7.766  1.00 35.72
ATOM  11390  NE  ARG  1690    48.987 -11.749  -7.919  1.00 38.51
ATOM  11391  CZ  ARG  1690    49.548 -10.854  -7.110  1.00 38.81
ATOM  11392  NH1 ARG  1690    50.285 -11.253  -6.082  1.00 38.33
ATOM  11393  NH2 ARG  1690    49.374  -9.557  -7.331  1.00 38.70
ATOM  11394  C   ARG  1690    44.895 -15.329  -7.627  1.00 29.79
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ATOM  11397  CA  ILE  1691    43.223 -14.874  -5.920  1.00 27.99
ATOM  11398  CB  ILE  1691    42.368 -13.687  -5.428  1.00 28.66
ATOM  11399  CG2 ILE  1691    41.431 -14.141  -4.310  1.00 29.07
ATOM  11400  CG1 ILE  1691    43.290 -12.569  -4.939  1.00 27.59
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ATOM  11402  C   ILE  1691    42.322 -16.053  -6.278  1.00 28.14
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ATOM  11406  CB  THR  1692    40.089 -16.670  -9.207  1.00 27.92
ATOM  11407  OG1 THR  1692    39.305 -15.477  -9.070  1.00 30.45
ATOM  11408  CG2 THR  1692    39.192 -17.799  -9.672  1.00 24.79
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ATOM  11413  CB  GLU  1693    44.509 -19.403  -9.788  1.00 34.46
ATOM  11414  CG  GLU  1693    43.985 -19.142 -11.188  1.00 39.25
ATOM  11415  CD  GLU  1693    45.098 -18.913 -12.193  1.00 41.31
ATOM  11416  OE1 GLU  1693    45.841 -17.920 -12.046  1.00 42.03
ATOM  11417  OE2 GLU  1693    45.227 -19.728 -13.133  1.00 44.22
ATOM  11418  C   GLU  1693    44.031 -20.022  -7.417  1.00 31.18
ATOM  11419  O   GLU  1693    44.220 -21.219  -7.180  1.00 32.59
ATOM  11420  N   ALA  1694    44.339 -19.055  -6.556  1.00 29.06
ATOM  11421  CA  ALA  1694    44.954 -19.349  -5.263  1.00 28.83
ATOM  11422  CB  ALA  1694    45.568 -18.077  -4.681  1.00 28.10
ATOM  11423  C   ALA  1694    43.997 -19.975  -4.252  1.00 28.71
ATOM  11424  O   ALA  1694    44.398 -20.833  -3.463  1.00 27.81
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ATOM	11426	CA	LEU	1695	41.750	-20.103	-3.336	1.00	28.55
ATOM	11427	CB	LEU	1695	40.729	-19.035	-2.936	1.00	28.01
ATOM	11428	CG	LEU	1695	41.242	-17.849	-2.121	1.00	30.89
ATOM	11429	CD1	LEU	1695	40.062	-16.980	-1.700	1.00	27.57
ATOM	11430	CD2	LEU	1695	41.989	-18.348	-0.898	1.00	32.34
ATOM	11431	C	LEU	1695	41.002	-21.306	-3.889	1.00	26.44
ATOM	11432	O	LEU	1695	40.848	-21.452	-5.099	1.00	27.20
ATOM	11433	N	ALA	1696	40.541	-22.168	-2.991	1.00	24.30
ATOM	11434	CA	ALA	1696	39.790	-23.346	-3.391	1.00	23.55
ATOM	11435	CB	ALA	1696	40.026	-24.479	-2.413	1.00	21.99
ATOM	11436	C	ALA	1696	38.313	-22.983	-3.416	1.00	23.10
ATOM	11437	O	ALA	1696	37.562	-23.440	-4.279	1.00	24.16
ATOM	11438	N	ILE	1697	37.898	-22.155	-2.464	1.00	21.53
ATOM	11439	CA	ILE	1697	36.506	-21.734	-2.391	1.00	20.71
ATOM	11440	CB	ILE	1697	36.211	-20.965	-1.082	1.00	18.95
ATOM	11441	CG2	ILE	1697	36.340	-21.897	0.113	1.00	17.11
ATOM	11442	CG1	ILE	1697	37.158	-19.776	-0.955	1.00	18.41
ATOM	11443	CD1	ILE	1697	36.776	-18.806	0.147	1.00	20.97
ATOM	11444	C	ILE	1697	36.185	-20.823	-3.571	1.00	20.34
ATOM	11445	O	ILE	1697	37.073	-20.206	-4.155	1.00	20.05
ATOM	11446	N	PRO	1698	34.903	-20.739	-3.948	1.00	21.40
ATOM	11447	CD	PRO	1698	33.767	-21.568	-3.513	1.00	20.73
ATOM	11448	CA	PRO	1698	34.541	-19.878	-5.074	1.00	20.26
ATOM	11449	CB	PRO	1698	33.102	-20.302	-5.393	1.00	21.48
ATOM	11450	CG	PRO	1698	32.594	-20.847	-4.113	1.00	22.95
ATOM	11451	C	PRO	1698	34.689	-18.390	-4.769	1.00	20.91
ATOM	11452	O	PRO	1698	34.431	-17.932	-3.650	1.00	19.65
ATOM	11453	N	VAL	1699	35.138	-17.648	-5.770	1.00	18.53
ATOM	11454	CA	VAL	1699	35.337	-16.216	-5.637	1.00	19.92
ATOM	11455	CB	VAL	1699	36.802	-15.840	-5.991	1.00	20.40
ATOM	11456	CG1	VAL	1699	37.002	-14.335	-5.923	1.00	18.70
ATOM	11457	CG2	VAL	1699	37.751	-16.534	-5.028	1.00	18.50
ATOM	11458	C	VAL	1699	34.366	-15.480	-6.560	1.00	21.83
ATOM	11459	O	VAL	1699	34.374	-15.672	-7.779	1.00	22.52
ATOM	11460	N	ILE	1700	33.517	-14.648	-5.967	1.00	22.27
ATOM	11461	CA	ILE	1700	32.534	-13.886	-6.722	1.00	22.16
ATOM	11462	CB	ILE	1700	31.211	-13.759	-5.940	1.00	21.79
ATOM	11463	CG2	ILE	1700	30.243	-12.873	-6.700	1.00	22.27
ATOM	11464	CG1	ILE	1700	30.617	-15.150	-5.709	1.00	22.01
ATOM	11465	CD1	ILE	1700	29.416	-15.157	-4.789	1.00	24.61
ATOM	11466	C	ILE	1700	33.100	-12.504	-6.963	1.00	21.79
ATOM	11467	O	ILE	1700	33.537	-11.828	-6.030	1.00	21.47
ATOM	11468	N	GLY	1701	33.096	-12.079	-8.218	1.00	21.16
ATOM	11469	CA	GLY	1701	33.635	-10.773	-8.526	1.00	20.63
ATOM	11470	C	GLY	1701	32.633	-9.714	-8.929	1.00	21.51
ATOM	11471	O	GLY	1701	31.571	-10.003	-9.467	1.00	22.89
ATOM	11472	N	ILE	1702	32.990	-8.470	-8.642	1.00	24.15
ATOM	11473	CA	ILE	1702	32.184	-7.309	-8.988	1.00	25.08
ATOM	11474	CB	ILE	1702	31.275	-6.866	-7.804	1.00	25.11
ATOM	11475	CG2	ILE	1702	32.059	-6.838	-6.504	1.00	24.79
ATOM	11476	CG1	ILE	1702	30.679	-5.490	-8.083	1.00	28.41
ATOM	11477	CD1	ILE	1702	29.632	-5.485	-9.157	1.00	30.16
ATOM	11478	C	ILE	1702	33.209	-6.228	-9.321	1.00	25.61
ATOM	11479	O	ILE	1702	33.728	-5.553	-8.437	1.00	25.75
ATOM	11480	N	GLY	1703	33.515	-6.084	-10.608	1.00	27.06
ATOM	11481	CA	GLY	1703	34.501	-5.105	-11.017	1.00	24.09
ATOM	11482	C	GLY	1703	35.884	-5.717	-10.904	1.00	25.54
ATOM	11483	O	GLY	1703	36.873	-5.017	-10.680	1.00	27.11
ATOM	11484	N	ALA	1704	35.945	-7.037	-11.054	1.00	24.77
ATOM	11485	CA	ALA	1704	37.204	-7.767	-10.970	1.00	26.19
ATOM	11486	CB	ALA	1704	37.187	-8.691	-9.757	1.00	24.95
ATOM	11487	C	ALA	1704	37.454	-8.582	-12.238	1.00	26.93
ATOM	11488	O	ALA	1704	38.294	-9.482	-12.250	1.00	27.02
ATOM	11489	N	GLY	1705	36.725	-8.266	-13.303	1.00	27.42
ATOM	11490	CA	GLY	1705	36.895	-8.993	-14.545	1.00	27.32
ATOM	11491	C	GLY	1705	36.120	-10.297	-14.548	1.00	27.69
ATOM	11492	O	GLY	1705	35.490	-10.653	-13.551	1.00	28.16
ATOM	11493	N	ASN	1706	36.170	-11.017	-15.666	1.00	26.41
ATOM	11494	CA	ASN	1706	35.452	-12.279	-15.801	1.00	26.15
ATOM	11495	CB	ASN	1706	34.909	-12.423	-17.230	1.00	28.81
ATOM	11496	CG	ASN	1706	36.007	-12.410	-18.283	1.00	30.05
ATOM	11497	OD1	ASN	1706	35.750	-12.663	-19.462	1.00	32.36
ATOM	11498	ND2	ASN	1706	37.231	-12.111	-17.866	1.00	27.42
ATOM	11499	C	ASN	1706	36.306	-13.492	-15.452	1.00	27.06
ATOM	11500	O	ASN	1706	36.005	-14.609	-15.874	1.00	28.09
ATOM	11501	N	VAL	1707	37.358	-13.268	-14.669	1.00	25.49

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ATOM   11502  CA  VAL  1707      38.270 -14.335 -14.258  1.00 27.59
ATOM   11503  CB  VAL  1707      39.700 -13.780 -14.047  1.00 29.11
ATOM   11504  CG1 VAL  1707      40.656 -14.914 -13.711  1.00 33.83
ATOM   11505  CG2 VAL  1707      40.169 -13.053 -15.299  1.00 30.80
ATOM   11506  C   VAL  1707      37.815 -15.016 -12.967  1.00 26.92
ATOM   11507  O   VAL  1707      38.311 -16.088 -12.612  1.00 26.60
ATOM   11508  N   THR  1708      36.878 -14.389 -12.263  1.00 24.26
ATOM   11509  CA  THR  1708      36.364 -14.948 -11.019  1.00 23.16
ATOM   11510  CB  THR  1708      35.625 -13.867 -10.202  1.00 22.08
ATOM   11511  OG1 THR  1708      34.731 -13.145 -11.059  1.00 20.76
ATOM   11512  CG2 THR  1708      36.620 -12.894  -9.592  1.00 22.51
ATOM   11513  C   THR  1708      35.427 -16.122 -11.300  1.00 23.44
ATOM   11514  O   THR  1708      34.965 -16.304 -12.427  1.00 24.03
ATOM   11515  N   ASP  1709      35.157 -16.921 -10.271  1.00 23.18
ATOM   11516  CA  ASP  1709      34.299 -18.098 -10.398  1.00 24.19
ATOM   11517  CB  ASP  1709      34.425 -18.954  -9.139  1.00 26.39
ATOM   11518  CG  ASP  1709      35.857 -19.362  -8.861  1.00 28.72
ATOM   11519  OD1 ASP  1709      36.395 -20.179  -9.636  1.00 28.85
ATOM   11520  OD2 ASP  1709      36.440 -18.858  -7.876  1.00 27.39
ATOM   11521  C   ASP  1709      32.843 -17.708 -10.608  1.00 24.34
ATOM   11522  O   ASP  1709      32.054 -18.461 -11.182  1.00 23.59
ATOM   11523  N   GLY  1710      32.499 -16.521 -10.127  1.00 22.85
ATOM   11524  CA  GLY  1710      31.143 -16.032 -10.261  1.00 21.26
ATOM   11525  C   GLY  1710      31.131 -14.522 -10.289  1.00 19.07
ATOM   11526  O   GLY  1710      32.168 -13.878 -10.113  1.00 18.22
ATOM   11527  N   GLN  1711      29.949 -13.956 -10.505  1.00 18.74
ATOM   11528  CA  GLN  1711      29.790 -12.510 -10.570  1.00 18.89
ATOM   11529  CB  GLN  1711      29.502 -12.074 -12.007  1.00 18.46
ATOM   11530  CG  GLN  1711      30.592 -12.373 -13.018  1.00 15.95
ATOM   11531  CD  GLN  1711      31.848 -11.589 -12.758  1.00 19.23
ATOM   11532  OE1 GLN  1711      31.796 -10.409 -12.418  1.00 20.10
ATOM   11533  NE2 GLN  1711      32.995 -12.237 -12.930  1.00 21.35
ATOM   11534  C   GLN  1711      28.623 -12.056  -9.712  1.00 19.28
ATOM   11535  O   GLN  1711      27.756 -12.852  -9.359  1.00 18.49
ATOM   11536  N   ILE  1712      28.605 -10.767  -9.401  1.00 21.16
ATOM   11537  CA  ILE  1712      27.522 -10.172  -8.634  1.00 23.23
ATOM   11538  CB  ILE  1712      27.772 -10.262  -7.109  1.00 24.48
ATOM   11539  CG2 ILE  1712      28.930  -9.342  -6.706  1.00 25.08
ATOM   11540  CG1 ILE  1712      26.492  -9.870  -6.365  1.00 25.35
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ATOM   11547  CG  LEU  1713      26.489  -5.428 -11.427  1.00 33.56
ATOM   11548  CD1 LEU  1713      26.318  -5.532 -12.934  1.00 36.19
ATOM   11549  CD2 LEU  1713      25.851  -4.137 -10.908  1.00 36.32
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ATOM   11561  CB  MET  1715      18.855  -6.059  -8.881  1.00 18.66
ATOM   11562  CG  MET  1715      18.253  -5.362  -7.667  1.00 16.03
ATOM   11563  SD  MET  1715      16.444  -5.523  -7.565  1.00 14.77
ATOM   11564  CE  MET  1715      15.937  -4.242  -8.684  1.00 11.94
ATOM   11565  C   MET  1715      19.519  -3.983 -10.101  1.00 19.82
ATOM   11566  O   MET  1715      19.002  -3.953 -11.213  1.00 21.61
ATOM   11567  N   HIS  1716      19.668  -2.890  -9.364  1.00 19.03
ATOM   11568  CA  HIS  1716      19.192  -1.600  -9.855  1.00 22.19
ATOM   11569  CB  HIS  1716      19.137  -0.596  -8.703  1.00 20.78
ATOM   11570  CG  HIS  1716      18.098  -0.932  -7.675  1.00 21.06
ATOM   11571  CD2 HIS  1716      18.126  -1.784  -6.623  1.00 18.32
ATOM   11572  ND1 HIS  1716      16.826  -0.399  -7.699  1.00 20.68
ATOM   11573  CE1 HIS  1716      16.116  -0.907  -6.707  1.00 18.23
ATOM   11574  NE2 HIS  1716      16.882  -1.750  -6.039  1.00 21.81
ATOM   11575  C   HIS  1716      20.035  -1.067 -11.018  1.00 22.57
ATOM   11576  O   HIS  1716      19.558  -0.273 -11.835  1.00 22.73
ATOM   11577  N   ASP  1717      21.287  -1.504 -11.097  1.00 23.70
ATOM   11578  CA  ASP  1717      22.145  -1.089 -12.199  1.00 26.09
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ATOM    11580   CG   ASP  1717       23.891   -0.070  -10.672   1.00  27.23
ATOM    11581   OD1  ASP  1717       23.334    1.040  -10.740   1.00  28.27
ATOM    11582   OD2  ASP  1717       24.663   -0.386   -9.748   1.00  27.57
ATOM    11583   C    ASP  1717       21.939   -2.064  -13.353   1.00  27.25
ATOM    11584   O    ASP  1717       22.022   -1.687  -14.522   1.00  26.75
ATOM    11585   N    ALA  1718       21.641   -3.315  -13.013   1.00  26.99
ATOM    11586   CA   ALA  1718       21.424   -4.349  -14.019   1.00  28.53
ATOM    11587   CB   ALA  1718       21.320   -5.716  -13.344   1.00  28.27
ATOM    11588   C    ALA  1718       20.196   -4.099  -14.896   1.00  28.41
ATOM    11589   O    ALA  1718       20.106   -4.644  -15.995   1.00  29.83
ATOM    11590   N    PHE  1719       19.258   -3.278  -14.422   1.00  30.20
ATOM    11591   CA   PHE  1719       18.053   -2.968  -15.197   1.00  29.35
ATOM    11592   CB   PHE  1719       16.797   -3.436  -14.458   1.00  30.92
ATOM    11593   CG   PHE  1719       16.863   -4.866  -14.004   1.00  31.07
ATOM    11594   CD1  PHE  1719       17.299   -5.863  -14.870   1.00  34.00
ATOM    11595   CD2  PHE  1719       16.500   -5.215  -12.708   1.00  33.37
ATOM    11596   CE1  PHE  1719       17.379   -7.187  -14.453   1.00  33.82
ATOM    11597   CE2  PHE  1719       16.574   -6.537  -12.278   1.00  34.22
ATOM    11598   CZ   PHE  1719       17.016   -7.524  -13.155   1.00  35.15
ATOM    11599   C    PHE  1719       17.912   -1.484  -15.533   1.00  30.03
ATOM    11600   O    PHE  1719       16.837   -1.021  -15.919   1.00  29.75
ATOM    11601   N    GLY  1720       18.999   -0.738  -15.391   1.00  30.77
ATOM    11602   CA   GLY  1720       18.955    0.680  -15.699   1.00  29.22
ATOM    11603   C    GLY  1720       17.997    1.486  -14.839   1.00  29.76
ATOM    11604   O    GLY  1720       17.524    2.546  -15.258   1.00  30.07
ATOM    11605   N    ILE  1721       17.701    0.998  -13.638   1.00  25.96
ATOM    11606   CA   ILE  1721       16.806    1.721  -12.743   1.00  25.33
ATOM    11607   CB   ILE  1721       16.312    0.817  -11.572   1.00  21.96
ATOM    11608   CG2  ILE  1721       15.463    1.629  -10.606   1.00  22.06
ATOM    11609   CG1  ILE  1721       15.492   -0.352  -12.118   1.00  23.00
ATOM    11610   CD1  ILE  1721       15.126   -1.395  -11.081   1.00  22.54
ATOM    11611   C    ILE  1721       17.530    2.940  -12.168   1.00  25.41
ATOM    11612   O    ILE  1721       16.960    4.020  -12.089   1.00  25.23
ATOM    11613   N    THR  1722       18.792    2.766  -11.778   1.00  28.45
ATOM    11614   CA   THR  1722       19.563    3.871  -11.206   1.00  31.68
ATOM    11615   CB   THR  1722       20.885    3.387  -10.588   1.00  31.93
ATOM    11616   OG1  THR  1722       21.778    2.969  -11.626   1.00  35.74
ATOM    11617   CG2  THR  1722       20.634    2.227   -9.643   1.00  28.90
ATOM    11618   C    THR  1722       19.895    4.940  -12.243   1.00  34.83
ATOM    11619   O    THR  1722       20.220    4.621  -13.386   1.00  34.13
ATOM    11620   N    GLY  1723       19.811    6.200  -11.816   1.00  38.15
ATOM    11621   CA   GLY  1723       20.100    7.342  -12.667   1.00  44.26
ATOM    11622   C    GLY  1723       20.393    7.053  -14.126   1.00  48.27
ATOM    11623   O    GLY  1723       19.534    6.554  -14.857   1.00  50.07
ATOM    11624   N    GLY  1724       21.612    7.368  -14.554   1.00  50.26
ATOM    11625   CA   GLY  1724       21.990    7.136  -15.936   1.00  52.51
ATOM    11626   C    GLY  1724       23.414    6.641  -16.078   1.00  54.09
ATOM    11627   O    GLY  1724       23.677    5.698  -16.825   1.00  55.33
ATOM    11628   N    HIS  1725       24.338    7.275  -15.363   1.00  55.09
ATOM    11629   CA   HIS  1725       25.742    6.881  -15.429   1.00  56.44
ATOM    11630   CB   HIS  1725       26.648    8.096  -15.214   1.00  58.71
ATOM    11631   CG   HIS  1725       26.616    9.079  -16.342   1.00  61.40
ATOM    11632   CD2  HIS  1725       26.415   10.418  -16.354   1.00  62.22
ATOM    11633   ND1  HIS  1725       26.821    8.711  -17.654   1.00  62.27
ATOM    11634   CE1  HIS  1725       26.748    9.780  -18.426   1.00  63.11
ATOM    11635   NE2  HIS  1725       26.503   10.829  -17.662   1.00  63.16
ATOM    11636   C    HIS  1725       26.097    5.797  -14.419   1.00  55.56
ATOM    11637   O    HIS  1725       26.673    6.078  -13.369   1.00  55.59
ATOM    11638   N    ILE  1726       25.754    4.555  -14.748   1.00  54.42
ATOM    11639   CA   ILE  1726       26.044    3.425  -13.875   1.00  53.21
ATOM    11640   CB   ILE  1726       25.356    2.134  -14.382   1.00  53.76
ATOM    11641   CG2  ILE  1726       23.843    2.277  -14.290   1.00  53.32
ATOM    11642   CG1  ILE  1726       25.788    1.845  -15.822   1.00  54.09
ATOM    11643   CD1  ILE  1726       25.277    0.524  -16.365   1.00  53.89
ATOM    11644   C    ILE  1726       27.554    3.195  -13.821   1.00  51.83
ATOM    11645   O    ILE  1726       28.297    3.700  -14.665   1.00  51.84
ATOM    11646   N    PRO  1727       28.029    2.431  -12.825   1.00  49.69
ATOM    11647   CD   PRO  1727       27.283    1.702  -11.785   1.00  49.25
ATOM    11648   CA   PRO  1727       29.468    2.172  -12.715   1.00  48.30
ATOM    11649   CB   PRO  1727       29.566    1.318  -11.453   1.00  48.75
ATOM    11650   CG   PRO  1727       28.250    0.611  -11.416   1.00  49.22
ATOM    11651   C    PRO  1727       30.040    1.480  -13.953   1.00  46.66
ATOM    11652   O    PRO  1727       29.368    0.669  -14.589   1.00  46.75
ATOM    11653   N    LYS  1728       31.283    1.808  -14.290   1.00  44.70
ATOM    11654   CA   LYS  1728       31.940    1.230  -15.457   1.00  42.31
ATOM    11655   CB   LYS  1728       33.379    1.747  -15.571   1.00  45.34
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ATOM	11656	CG	LYS	1728	33.500	3.186	-16.065	1.00	49.29
ATOM	11657	CD	LYS	1728	32.922	4.188	-15.074	1.00	51.69
ATOM	11658	CE	LYS	1728	33.050	5.614	-15.598	1.00	52.92
ATOM	11659	NZ	LYS	1728	32.499	6.622	-14.646	1.00	54.39
ATOM	11660	C	LYS	1728	31.954	-0.293	-15.470	1.00	38.59
ATOM	11661	O	LYS	1728	31.994	-0.906	-16.536	1.00	37.57
ATOM	11662	N	PHE	1729	31.920	-0.904	-14.292	1.00	34.69
ATOM	11663	CA	PHE	1729	31.947	-2.358	-14.201	1.00	30.76
ATOM	11664	CB	PHE	1729	32.582	-2.782	-12.870	1.00	31.47
ATOM	11665	CG	PHE	1729	31.882	-2.234	-11.657	1.00	31.03
ATOM	11666	CD1	PHE	1729	30.666	-2.765	-11.232	1.00	31.72
ATOM	11667	CD2	PHE	1729	32.445	-1.190	-10.932	1.00	31.83
ATOM	11668	CE1	PHE	1729	30.027	-2.265	-10.099	1.00	30.43
ATOM	11669	CE2	PHE	1729	31.816	-0.684	-9.800	1.00	32.00
ATOM	11670	CZ	PHE	1729	30.604	-1.222	-9.381	1.00	32.08
ATOM	11671	C	PHE	1729	30.571	-2.999	-14.346	1.00	27.80
ATOM	11672	O	PHE	1729	30.460	-4.215	-14.486	1.00	26.63
ATOM	11673	N	ALA	1730	29.526	-2.181	-14.321	1.00	26.96
ATOM	11674	CA	ALA	1730	28.165	-2.694	-14.435	1.00	26.38
ATOM	11675	CB	ALA	1730	27.243	-1.938	-13.486	1.00	25.85
ATOM	11676	C	ALA	1730	27.627	-2.611	-15.852	1.00	26.64
ATOM	11677	O	ALA	1730	28.155	-1.886	-16.694	1.00	27.21
ATOM	11678	N	LYS	1731	26.565	-3.362	-16.112	1.00	25.32
ATOM	11679	CA	LYS	1731	25.951	-3.348	-17.427	1.00	26.32
ATOM	11680	CB	LYS	1731	26.419	-4.550	-18.241	1.00	27.13
ATOM	11681	CG	LYS	1731	25.726	-4.683	-19.587	1.00	29.75
ATOM	11682	CD	LYS	1731	26.304	-5.843	-20.375	1.00	31.89
ATOM	11683	CE	LYS	1731	25.551	-6.072	-21.667	1.00	32.08
ATOM	11684	NZ	LYS	1731	26.136	-7.215	-22.417	1.00	34.11
ATOM	11685	C	LYS	1731	24.431	-3.361	-17.307	1.00	25.48
ATOM	11686	O	LYS	1731	23.868	-4.094	-16.498	1.00	24.67
ATOM	11687	N	ASN	1732	23.779	-2.534	-18.113	1.00	24.62
ATOM	11688	CA	ASN	1732	22.326	-2.450	-18.112	1.00	24.54
ATOM	11689	CB	ASN	1732	21.883	-1.055	-18.565	1.00	23.33
ATOM	11690	CG	ASN	1732	20.371	-0.911	-18.640	1.00	21.61
ATOM	11691	OD1	ASN	1732	19.637	-1.889	-18.565	1.00	19.03
ATOM	11692	ND2	ASN	1732	19.903	0.326	-18.804	1.00	23.82
ATOM	11693	C	ASN	1732	21.785	-3.508	-19.068	1.00	25.76
ATOM	11694	O	ASN	1732	21.773	-3.302	-20.283	1.00	25.61
ATOM	11695	N	PHE	1733	21.344	-4.637	-18.520	1.00	25.01
ATOM	11696	CA	PHE	1733	20.811	-5.719	-19.337	1.00	25.29
ATOM	11697	CB	PHE	1733	20.880	-7.049	-18.582	1.00	26.19
ATOM	11698	CG	PHE	1733	22.279	-7.524	-18.325	1.00	25.90
ATOM	11699	CD1	PHE	1733	22.973	-7.108	-17.195	1.00	26.87
ATOM	11700	CD2	PHE	1733	22.922	-8.353	-19.237	1.00	26.66
ATOM	11701	CE1	PHE	1733	24.292	-7.510	-16.975	1.00	25.54
ATOM	11702	CE2	PHE	1733	24.242	-8.761	-19.029	1.00	26.56
ATOM	11703	CZ	PHE	1733	24.926	-8.335	-17.895	1.00	27.21
ATOM	11704	C	PHE	1733	19.380	-5.471	-19.807	1.00	26.55
ATOM	11705	O	PHE	1733	18.902	-6.133	-20.726	1.00	22.93
ATOM	11706	N	LEU	1734	18.696	-4.521	-19.178	1.00	27.50
ATOM	11707	CA	LEU	1734	17.330	-4.212	-19.569	1.00	29.76
ATOM	11708	CB	LEU	1734	16.605	-3.451	-18.461	1.00	28.65
ATOM	11709	CG	LEU	1734	15.196	-2.972	-18.829	1.00	27.48
ATOM	11710	CD1	LEU	1734	14.348	-4.147	-19.304	1.00	25.62
ATOM	11711	CD2	LEU	1734	14.566	-2.305	-17.625	1.00	23.90
ATOM	11712	C	LEU	1734	17.293	-3.383	-20.847	1.00	32.37
ATOM	11713	O	LEU	1734	16.613	-3.748	-21.804	1.00	31.12
ATOM	11714	N	ALA	1735	18.023	-2.270	-20.855	1.00	36.48
ATOM	11715	CA	ALA	1735	18.068	-1.378	-22.011	1.00	42.29
ATOM	11716	CB	ALA	1735	19.293	-0.470	-21.929	1.00	42.69
ATOM	11717	C	ALA	1735	18.100	-2.186	-23.297	1.00	46.05
ATOM	11718	O	ALA	1735	17.499	-1.801	-24.307	1.00	46.72
ATOM	11719	N	GLU	1736	18.797	-3.317	-23.239	1.00	49.05
ATOM	11720	CA	GLU	1736	18.923	-4.225	-24.374	1.00	51.86
ATOM	11721	CB	GLU	1736	19.548	-5.551	-23.913	1.00	53.55
ATOM	11722	CG	GLU	1736	20.814	-5.411	-23.072	1.00	55.23
ATOM	11723	CD	GLU	1736	22.018	-4.944	-23.873	1.00	57.29
ATOM	11724	OE1	GLU	1736	21.940	-3.866	-24.505	1.00	58.69
ATOM	11725	OE2	GLU	1736	23.046	-5.657	-23.869	1.00	57.04
ATOM	11726	C	GLU	1736	17.546	-4.495	-24.986	1.00	52.19
ATOM	11727	O	GLU	1736	17.355	-4.351	-26.195	1.00	53.04
ATOM	11728	N	THR	1737	16.594	-4.876	-24.134	1.00	51.41
ATOM	11729	CA	THR	1737	15.228	-5.187	-24.551	1.00	49.15
ATOM	11730	CB	THR	1737	14.969	-6.699	-24.442	1.00	50.52
ATOM	11731	OG1	THR	1737	13.658	-7.002	-24.935	1.00	54.05
ATOM	11732	CG2	THR	1737	15.082	-7.146	-22.993	1.00	51.48

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ATOM  11733  C    THR  1737   14.202  -4.449 -23.685  1.00 46.27
ATOM  11734  O    THR  1737   14.491  -3.381 -23.149  1.00 47.44
ATOM  11735  N    GLY  1738   13.004  -5.015 -23.557  1.00 42.24
ATOM  11736  CA   GLY  1738   11.969  -4.397 -22.742  1.00 36.72
ATOM  11737  C    GLY  1738   11.296  -5.412 -21.831  1.00 33.77
ATOM  11738  O    GLY  1738   10.106  -5.314 -21.520  1.00 31.85
ATOM  11739  N    ASP  1739   12.076  -6.395 -21.398  1.00 31.02
ATOM  11740  CA   ASP  1739   11.587  -7.461 -20.535  1.00 29.23
ATOM  11741  CB   ASP  1739   11.418  -8.744 -21.358  1.00 32.58
ATOM  11742  CG   ASP  1739   10.678  -9.832 -20.609  1.00 35.23
ATOM  11743  OD1  ASP  1739   11.103 -10.195 -19.493  1.00 35.59
ATOM  11744  OD2  ASP  1739    9.667 -10.332 -21.147  1.00 38.35
ATOM  11745  C    ASP  1739   12.612  -7.688 -19.425  1.00 26.10
ATOM  11746  O    ASP  1739   13.748  -8.092 -19.691  1.00 24.19
ATOM  11747  N    ILE  1740   12.215  -7.417 -18.184  1.00 23.09
ATOM  11748  CA   ILE  1740   13.111  -7.596 -17.050  1.00 21.06
ATOM  11749  CB   ILE  1740   12.454  -7.102 -15.740  1.00 20.26
ATOM  11750  CG2  ILE  1740   13.307  -7.516 -14.531  1.00 21.30
ATOM  11751  CG1  ILE  1740   12.300  -5.584 -15.794  1.00 20.28
ATOM  11752  CD1  ILE  1740   11.517  -4.983 -14.637  1.00 21.21
ATOM  11753  C    ILE  1740   13.545  -9.049 -16.896  1.00 19.53
ATOM  11754  O    ILE  1740   14.724  -9.337 -16.663  1.00 20.00
ATOM  11755  N    ARG  1741   12.600  -9.971 -17.030  1.00 18.98
ATOM  11756  CA   ARG  1741   12.937 -11.384 -16.911  1.00 19.96
ATOM  11757  CB   ARG  1741   11.668 -12.236 -16.974  1.00 19.87
ATOM  11758  CG   ARG  1741   10.849 -12.142 -15.696  1.00 21.32
ATOM  11759  CD   ARG  1741    9.513 -12.853 -15.810  1.00 23.47
ATOM  11760  NE   ARG  1741    8.776 -12.794 -14.549  1.00 25.80
ATOM  11761  CZ   ARG  1741    8.294 -11.676 -14.013  1.00 27.35
ATOM  11762  NH1  ARG  1741    8.462 -10.514 -14.627  1.00 29.85
ATOM  11763  NH2  ARG  1741    7.651 -11.716 -12.853  1.00 28.28
ATOM  11764  C    ARG  1741   13.936 -11.809 -17.984  1.00 20.67
ATOM  11765  O    ARG  1741   14.888 -12.546 -17.702  1.00 20.44
ATOM  11766  N    ALA  1742   13.733 -11.333 -19.209  1.00 18.88
ATOM  11767  CA   ALA  1742   14.642 -11.663 -20.299  1.00 19.67
ATOM  11768  CB   ALA  1742   14.100 -11.119 -21.617  1.00 17.58
ATOM  11769  C    ALA  1742   16.012 -11.057 -20.002  1.00 19.77
ATOM  11770  O    ALA  1742   17.040 -11.601 -20.391  1.00 21.64
ATOM  11771  N    ALA  1743   16.011  -9.923 -19.308  1.00 19.15
ATOM  11772  CA   ALA  1743   17.245  -9.244 -18.946  1.00 18.94
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ATOM  11775  O    ALA  1743   19.231 -10.194 -17.984  1.00 19.37
ATOM  11776  N    VAL  1744   17.268 -10.706 -17.010  1.00 20.08
ATOM  11777  CA   VAL  1744   17.861 -11.560 -15.992  1.00 19.96
ATOM  11778  CB   VAL  1744   16.791 -12.000 -14.961  1.00 21.45
ATOM  11779  CG1  VAL  1744   17.314 -13.143 -14.099  1.00 19.83
ATOM  11780  CG2  VAL  1744   16.429 -10.812 -14.071  1.00 18.35
ATOM  11781  C    VAL  1744   18.485 -12.783 -16.659  1.00 22.05
ATOM  11782  O    VAL  1744   19.602 -13.197 -16.326  1.00 21.12
ATOM  11783  N    ARG  1745   17.762 -13.356 -17.612  1.00 21.99
ATOM  11784  CA   ARG  1745   18.265 -14.515 -18.333  1.00 24.40
ATOM  11785  CB   ARG  1745   17.191 -15.066 -19.275  1.00 25.74
ATOM  11786  CG   ARG  1745   15.991 -15.664 -18.561  1.00 26.03
ATOM  11787  CD   ARG  1745   15.141 -16.466 -19.527  1.00 29.74
ATOM  11788  NE   ARG  1745   14.575 -15.629 -20.580  1.00 31.09
ATOM  11789  CZ   ARG  1745   13.454 -14.924 -20.456  1.00 33.26
ATOM  11790  NH1  ARG  1745   12.767 -14.957 -19.320  1.00 31.03
ATOM  11791  NH2  ARG  1745   13.024 -14.183 -21.470  1.00 33.72
ATOM  11792  C    ARG  1745   19.523 -14.161 -19.126  1.00 24.45
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ATOM  11794  N    GLN  1746   19.598 -12.925 -19.612  1.00 24.53
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ATOM  11796  CB   GLN  1746   20.500 -11.120 -21.022  1.00 24.98
ATOM  11797  CG   GLN  1746   21.506 -10.729 -22.100  1.00 26.46
ATOM  11798  CD   GLN  1746   21.249  -9.339 -22.651  1.00 28.72
ATOM  11799  OE1  GLN  1746   20.132  -9.019 -23.066  1.00 27.11
ATOM  11800  NE2  GLN  1746   22.282  -8.506 -22.662  1.00 30.62
ATOM  11801  C    GLN  1746   21.984 -12.410 -19.491  1.00 24.23
ATOM  11802  O    GLN  1746   23.071 -12.850 -19.860  1.00 23.92
ATOM  11803  N    TYR  1747   21.800 -11.831 -18.311  1.00 23.27
ATOM  11804  CA   TYR  1747   22.883 -11.693 -17.352  1.00 22.18
ATOM  11805  CB   TYR  1747   22.363 -10.949 -16.114  1.00 21.72
ATOM  11806  CG   TYR  1747   23.266 -10.978 -14.901  1.00 20.80
ATOM  11807  CD1  TYR  1747   24.581 -10.525 -14.969  1.00 20.83
ATOM  11808  CE1  TYR  1747   25.406 -10.540 -13.844  1.00 21.19
ATOM  11809  CD2  TYR  1747   22.794 -11.446 -13.677  1.00 20.71
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ATOM  11810  CE2  TYR  1747    23.610  -11.463  -12.546  1.00  21.91
ATOM  11811  CZ   TYR  1747    24.913  -11.011  -12.640  1.00  20.88
ATOM  11812  OH   TYR  1747    25.730  -11.044  -11.530  1.00  22.08
ATOM  11813  C    TYR  1747    23.417  -13.079  -16.987  1.00  21.20
ATOM  11814  O    TYR  1747    24.625  -13.303  -16.992  1.00  21.41
ATOM  11815  N    MET  1748    22.516  -14.010  -16.692  1.00  19.89
ATOM  11816  CA   MET  1748    22.915  -15.370  -16.327  1.00  22.82
ATOM  11817  CB   MET  1748    21.680  -16.205  -15.994  1.00  22.86
ATOM  11818  CG   MET  1748    20.883  -15.673  -14.814  1.00  24.78
ATOM  11819  SD   MET  1748    19.282  -16.477  -14.671  1.00  29.17
ATOM  11820  CE   MET  1748    19.786  -18.014  -13.979  1.00  26.45
ATOM  11821  C    MET  1748    23.692  -16.047  -17.452  1.00  22.62
ATOM  11822  O    MET  1748    24.653  -16.786  -17.213  1.00  21.81
ATOM  11823  N    ALA  1749    23.262  -15.790  -18.680  1.00  22.35
ATOM  11824  CA   ALA  1749    23.900  -16.374  -19.848  1.00  21.37
ATOM  11825  CB   ALA  1749    22.980  -16.228  -21.061  1.00  22.11
ATOM  11826  C    ALA  1749    25.268  -15.766  -20.148  1.00  20.89
ATOM  11827  O    ALA  1749    26.212  -16.489  -20.461  1.00  23.24
ATOM  11828  N    GLU  1750    25.390  -14.446  -20.053  1.00  21.41
ATOM  11829  CA   GLU  1750    26.671  -13.808  -20.352  1.00  21.76
ATOM  11830  CB   GLU  1750    26.497  -12.300  -20.528  1.00  23.39
ATOM  11831  CG   GLU  1750    25.501  -11.917  -21.613  1.00  25.73
ATOM  11832  CD   GLU  1750    25.685  -10.499  -22.093  1.00  25.79
ATOM  11833  OE1  GLU  1750    26.438   -9.746  -21.442  1.00  25.87
ATOM  11834  OE2  GLU  1750    25.070  -10.130  -23.123  1.00  28.21
ATOM  11835  C    GLU  1750    27.749  -14.084  -19.307  1.00  23.50
ATOM  11836  O    GLU  1750    28.942  -14.115  -19.627  1.00  21.76
ATOM  11837  N    VAL  1751    27.345  -14.269  -18.054  1.00  23.02
ATOM  11838  CA   VAL  1751    28.317  -14.558  -17.007  1.00  23.63
ATOM  11839  CB   VAL  1751    27.674  -14.482  -15.593  1.00  23.59
ATOM  11840  CG1  VAL  1751    28.597  -15.124  -14.563  1.00  22.90
ATOM  11841  CG2  VAL  1751    27.431  -13.029  -15.214  1.00  22.54
ATOM  11842  C    VAL  1751    28.893  -15.952  -17.233  1.00  24.14
ATOM  11843  O    VAL  1751    30.100  -16.164  -17.100  1.00  25.38
ATOM  11844  N    GLU  1752    28.028  -16.895  -17.589  1.00  24.05
ATOM  11845  CA   GLU  1752    28.459  -18.264  -17.834  1.00  26.81
ATOM  11846  CB   GLU  1752    27.247  -19.196  -17.907  1.00  28.09
ATOM  11847  CG   GLU  1752    27.611  -20.655  -18.151  1.00  30.83
ATOM  11848  CD   GLU  1752    26.452  -21.589  -17.904  1.00  30.97
ATOM  11849  OE1  GLU  1752    26.551  -22.775  -18.279  1.00  32.52
ATOM  11850  OE2  GLU  1752    25.439  -21.143  -17.328  1.00  31.48
ATOM  11851  C    GLU  1752    29.284  -18.397  -19.113  1.00  28.55
ATOM  11852  O    GLU  1752    30.237  -19.173  -19.164  1.00  29.30
ATOM  11853  N    SER  1753    28.914  -17.646  -20.146  1.00  28.43
ATOM  11854  CA   SER  1753    29.640  -17.701  -21.413  1.00  29.68
ATOM  11855  CB   SER  1753    28.832  -17.023  -22.521  1.00  30.24
ATOM  11856  OG   SER  1753    27.577  -17.653  -22.696  1.00  36.50
ATOM  11857  C    SER  1753    30.988  -17.008  -21.283  1.00  30.05
ATOM  11858  O    SER  1753    31.950  -17.366  -21.961  1.00  29.58
ATOM  11859  N    GLY  1754    31.047  -16.013  -20.404  1.00  28.51
ATOM  11860  CA   GLY  1754    32.276  -15.269  -20.213  1.00  27.36
ATOM  11861  C    GLY  1754    32.203  -13.911  -20.888  1.00  26.65
ATOM  11862  O    GLY  1754    33.136  -13.113  -20.801  1.00  26.59
ATOM  11863  N    VAL  1755    31.085  -13.644  -21.556  1.00  25.85
ATOM  11864  CA   VAL  1755    30.885  -12.379  -22.252  1.00  26.68
ATOM  11865  CB   VAL  1755    29.604  -12.421  -23.099  1.00  28.95
ATOM  11866  CG1  VAL  1755    29.419  -11.106  -23.840  1.00  29.75
ATOM  11867  CG2  VAL  1755    29.686  -13.578  -24.081  1.00  31.72
ATOM  11868  C    VAL  1755    30.807  -11.205  -21.286  1.00  26.82
ATOM  11869  O    VAL  1755    31.157  -10.073  -21.636  1.00  25.55
ATOM  11870  N    TYR  1756    30.346  -11.480  -20.068  1.00  25.63
ATOM  11871  CA   TYR  1756    30.233  -10.455  -19.031  1.00  25.13
ATOM  11872  CB   TYR  1756    28.764  -10.150  -18.707  1.00  25.56
ATOM  11873  CG   TYR  1756    28.618   -9.068  -17.657  1.00  24.46
ATOM  11874  CD1  TYR  1756    28.867   -7.734  -17.974  1.00  24.19
ATOM  11875  CE1  TYR  1756    28.852   -6.745  -16.998  1.00  25.87
ATOM  11876  CD2  TYR  1756    28.336   -9.388  -16.327  1.00  24.07
ATOM  11877  CE2  TYR  1756    28.319   -8.406  -15.338  1.00  24.15
ATOM  11878  CZ   TYR  1756    28.583   -7.086  -15.679  1.00  24.77
ATOM  11879  OH   TYR  1756    28.632   -6.112  -14.706  1.00  24.55
ATOM  11880  C    TYR  1756    30.931  -10.927  -17.761  1.00  25.03
ATOM  11881  O    TYR  1756    30.743  -12.059  -17.329  1.00  22.60
ATOM  11882  N    PRO  1757    31.748  -10.056  -17.145  1.00  27.09
ATOM  11883  CD   PRO  1757    32.331  -10.263  -15.807  1.00  26.60
ATOM  11884  CA   PRO  1757    32.016   -8.698  -17.622  1.00  28.05
ATOM  11885  CB   PRO  1757    32.530   -7.995  -16.370  1.00  29.31
ATOM  11886  CG   PRO  1757    33.281   -9.082  -15.679  1.00  29.30
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ATOM   11887  C   PRO  1757     33.031  -8.664 -18.761  1.00 30.41
ATOM   11888  O   PRO  1757     33.900  -9.529 -18.855  1.00 30.25
ATOM   11889  N   GLY  1758     32.911  -7.663 -19.627  1.00 31.45
ATOM   11890  CA  GLY  1758     33.839  -7.537 -20.735  1.00 32.26
ATOM   11891  C   GLY  1758     35.007  -6.657 -20.339  1.00 33.47
ATOM   11892  O   GLY  1758     35.073  -6.183 -19.202  1.00 30.45
ATOM   11893  N   GLU  1759     35.932  -6.427 -21.265  1.00 34.20
ATOM   11894  CA  GLU  1759     37.088  -5.589 -20.966  1.00 36.05
ATOM   11895  CB  GLU  1759     38.020  -5.500 -22.179  1.00 37.61
ATOM   11896  CG  GLU  1759     39.230  -4.611 -21.932  1.00 39.60
ATOM   11897  CD  GLU  1759     40.075  -5.093 -20.765  1.00 40.84
ATOM   11898  OE1 GLU  1759     40.868  -4.288 -20.231  1.00 43.08
ATOM   11899  OE2 GLU  1759     39.949  -6.278 -20.390  1.00 40.65
ATOM   11900  C   GLU  1759     36.665  -4.181 -20.550  1.00 36.19
ATOM   11901  O   GLU  1759     37.293  -3.560 -19.693  1.00 36.76
ATOM   11902  N   GLU  1760     35.596  -3.683 -21.162  1.00 37.70
ATOM   11903  CA  GLU  1760     35.095  -2.347 -20.863  1.00 38.57
ATOM   11904  CB  GLU  1760     33.950  -1.980 -21.809  1.00 41.14
ATOM   11905  CG  GLU  1760     34.038  -2.619 -23.182  1.00 43.82
ATOM   11906  CD  GLU  1760     33.669  -4.089 -23.154  1.00 44.67
ATOM   11907  OE1 GLU  1760     32.538  -4.404 -22.730  1.00 45.33
ATOM   11908  OE2 GLU  1760     34.508  -4.925 -23.556  1.00 45.49
ATOM   11909  C   GLU  1760     34.598  -2.255 -19.426  1.00 37.43
ATOM   11910  O   GLU  1760     34.479  -1.162 -18.873  1.00 37.27
ATOM   11911  N   HIS  1761     34.306  -3.411 -18.835  1.00 36.62
ATOM   11912  CA  HIS  1761     33.809  -3.487 -17.462  1.00 36.41
ATOM   11913  CB  HIS  1761     32.650  -4.485 -17.373  1.00 34.33
ATOM   11914  CG  HIS  1761     31.541  -4.218 -18.343  1.00 33.22
ATOM   11915  CD2 HIS  1761     31.033  -4.973 -19.346  1.00 31.29
ATOM   11916  ND1 HIS  1761     30.806  -3.053 -18.329  1.00 32.96
ATOM   11917  CE1 HIS  1761     29.892  -3.101 -19.281  1.00 32.22
ATOM   11918  NE2 HIS  1761     30.008  -4.255 -19.912  1.00 32.69
ATOM   11919  C   HIS  1761     34.905  -3.941 -16.504  1.00 37.42
ATOM   11920  O   HIS  1761     34.620  -4.320 -15.369  1.00 38.41
ATOM   11921  N   SER  1762     36.153  -3.898 -16.960  1.00 37.25
ATOM   11922  CA  SER  1762     37.276  -4.338 -16.144  1.00 37.81
ATOM   11923  CB  SER  1762     37.960  -5.527 -16.819  1.00 37.82
ATOM   11924  OG  SER  1762     37.022  -6.539 -17.142  1.00 36.90
ATOM   11925  C   SER  1762     38.309  -3.245 -15.884  1.00 39.62
ATOM   11926  O   SER  1762     38.410  -2.277 -16.642  1.00 37.84
ATOM   11927  N   PHE  1763     39.069  -3.402 -14.802  1.00 40.54
ATOM   11928  CA  PHE  1763     40.112  -2.441 -14.458  1.00 43.38
ATOM   11929  CB  PHE  1763     39.929  -1.897 -13.037  1.00 44.18
ATOM   11930  CG  PHE  1763     38.661  -1.112 -12.840  1.00 45.64
ATOM   11931  CD1 PHE  1763     37.477  -1.752 -12.485  1.00 46.71
ATOM   11932  CD2 PHE  1763     38.648   0.269 -13.014  1.00 46.22
ATOM   11933  CE1 PHE  1763     36.297  -1.028 -12.305  1.00 46.58
ATOM   11934  CE2 PHE  1763     37.475   1.004 -12.838  1.00 46.28
ATOM   11935  CZ  PHE  1763     36.297   0.353 -12.482  1.00 46.49
ATOM   11936  C   PHE  1763     41.475  -3.110 -14.567  1.00 45.31
ATOM   11937  O   PHE  1763     41.568  -4.325 -14.742  1.00 45.15
ATOM   11938  N   HIS  1764     42.531  -2.309 -14.464  1.00 47.11
ATOM   11939  CA  HIS  1764     43.897  -2.814 -14.551  1.00 48.73
ATOM   11940  CB  HIS  1764     44.368  -2.804 -16.007  1.00 48.11
ATOM   11941  CG  HIS  1764     43.714  -3.847 -16.858  1.00 47.92
ATOM   11942  CD2 HIS  1764     42.833  -3.742 -17.881  1.00 47.14
ATOM   11943  ND1 HIS  1764     43.935  -5.196 -16.681  1.00 48.69
ATOM   11944  CE1 HIS  1764     43.218  -5.877 -17.557  1.00 47.18
ATOM   11945  NE2 HIS  1764     42.541  -5.018 -18.297  1.00 46.67
ATOM   11946  C   HIS  1764     44.848  -1.989 -13.694  1.00 49.73
ATOM   11947  O   HIS  1764     45.534  -2.589 -12.839  1.00 50.49
ATOM   11948  OXT HIS  1764     44.896  -0.757 -13.887  1.00 51.77
ATOM   11949  C1  KPL  1765     27.748  -4.209  -4.469  1.00 37.13
ATOM   11950  C2  KPL  1765     27.949  -5.559  -3.746  1.00 36.67
ATOM   11951  C3  KPL  1765     27.104  -6.630  -4.447  1.00 36.77
ATOM   11952  C4  KPL  1765     29.432  -5.968  -3.834  1.00 38.31
ATOM   11953  O1  KPL  1765     30.255  -4.985  -3.190  1.00 40.50
ATOM   11954  C5  KPL  1765     27.511  -5.432  -2.265  1.00 36.08
ATOM   11955  O2  KPL  1765     28.306  -5.650  -1.372  1.00 36.16
ATOM   11956  C6  KPL  1765     26.106  -5.037  -1.885  1.00 33.38
ATOM   11957  O3  KPL  1765     25.273  -4.814  -2.736  1.00 35.07
ATOM   11958  O4  KPL  1765     25.770  -4.927  -0.590  1.00 32.90
ATOM   11959  CB  MET  1801     10.432 -42.440  39.264  1.00 62.99
ATOM   11960  CG  MET  1801     11.787 -41.787  39.475  1.00 64.83
ATOM   11961  SD  MET  1801     12.950 -42.846  40.338  1.00 67.79
ATOM   11962  CE  MET  1801     12.685 -42.311  42.031  1.00 67.34
ATOM   11963  C   MET  1801      8.891 -40.780  40.307  1.00 59.13
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ATOM	11964	O	MET	1801	7.710	-40.737	40.655	1.00	59.38
ATOM	11965	N	MET	1801	9.705	-40.456	37.968	1.00	61.53
ATOM	11966	CA	MET	1801	9.294	-41.449	38.998	1.00	60.88
ATOM	11967	N	LYS	1802	9.874	-40.256	41.033	1.00	56.22
ATOM	11968	CA	LYS	1802	9.599	-39.612	42.312	1.00	53.19
ATOM	11969	CB	LYS	1802	9.801	-40.624	43.447	1.00	54.60
ATOM	11970	CG	LYS	1802	9.046	-41.941	43.283	1.00	55.72
ATOM	11971	CD	LYS	1802	7.557	-41.813	43.598	1.00	56.31
ATOM	11972	CE	LYS	1802	7.306	-41.678	45.099	1.00	56.54
ATOM	11973	NZ	LYS	1802	5.851	-41.687	45.436	1.00	55.62
ATOM	11974	C	LYS	1802	10.437	-38.361	42.596	1.00	49.88
ATOM	11975	O	LYS	1802	10.760	-38.088	43.759	1.00	50.44
ATOM	11976	N	PRO	1803	10.811	-37.590	41.560	1.00	45.52
ATOM	11977	CD	PRO	1803	11.320	-36.225	41.816	1.00	44.97
ATOM	11978	CA	PRO	1803	10.530	-37.761	40.132	1.00	41.04
ATOM	11979	CB	PRO	1803	10.376	-36.334	39.651	1.00	42.80
ATOM	11980	CG	PRO	1803	11.465	-35.650	40.414	1.00	43.86
ATOM	11981	C	PRO	1803	11.674	-38.481	39.414	1.00	36.05
ATOM	11982	O	PRO	1803	12.591	-38.991	40.056	1.00	34.80
ATOM	11983	N	THR	1804	11.621	-38.511	38.084	1.00	30.62
ATOM	11984	CA	THR	1804	12.666	-39.155	37.283	1.00	26.97
ATOM	11985	CB	THR	1804	12.172	-39.435	35.853	1.00	25.88
ATOM	11986	OG1	THR	1804	11.046	-40.323	35.902	1.00	24.56
ATOM	11987	CG2	THR	1804	13.276	-40.073	35.021	1.00	22.12
ATOM	11988	C	THR	1804	13.880	-38.232	37.215	1.00	24.43
ATOM	11989	O	THR	1804	13.752	-37.056	36.888	1.00	22.49
ATOM	11990	N	THR	1805	15.055	-38.769	37.524	1.00	23.84
ATOM	11991	CA	THR	1805	16.278	-37.973	37.516	1.00	22.21
ATOM	11992	CB	THR	1805	16.829	-37.800	38.940	1.00	23.39
ATOM	11993	OG1	THR	1805	17.286	-39.072	39.423	1.00	25.01
ATOM	11994	CG2	THR	1805	15.756	-37.267	39.866	1.00	23.36
ATOM	11995	C	THR	1805	17.379	-38.614	36.682	1.00	21.44
ATOM	11996	O	THR	1805	17.268	-39.761	36.247	1.00	19.91
ATOM	11997	N	ILE	1806	18.453	-37.863	36.471	1.00	19.22
ATOM	11998	CA	ILE	1806	19.574	-38.376	35.706	1.00	20.35
ATOM	11999	CB	ILE	1806	20.696	-37.329	35.599	1.00	22.61
ATOM	12000	CG2	ILE	1806	21.806	-37.846	34.689	1.00	23.50
ATOM	12001	CG1	ILE	1806	20.133	-36.030	35.016	1.00	24.71
ATOM	12002	CD1	ILE	1806	21.079	-34.859	35.129	1.00	27.86
ATOM	12003	C	ILE	1806	20.108	-39.623	36.415	1.00	19.98
ATOM	12004	O	ILE	1806	20.612	-40.551	35.780	1.00	17.26
ATOM	12005	N	SER	1807	19.979	-39.652	37.736	1.00	19.88
ATOM	12006	CA	SER	1807	20.455	-40.796	38.505	1.00	20.30
ATOM	12007	CB	SER	1807	20.201	-40.578	40.000	1.00	22.82
ATOM	12008	OG	SER	1807	20.872	-39.418	40.459	1.00	29.05
ATOM	12009	C	SER	1807	19.777	-42.090	38.062	1.00	19.29
ATOM	12010	O	SER	1807	20.408	-43.148	38.010	1.00	18.78
ATOM	12011	N	LEU	1808	18.491	-42.002	37.741	1.00	19.36
ATOM	12012	CA	LEU	1808	17.731	-43.170	37.317	1.00	19.70
ATOM	12013	CB	LEU	1808	16.248	-42.828	37.204	1.00	21.62
ATOM	12014	CG	LEU	1808	15.233	-43.791	37.821	1.00	26.64
ATOM	12015	CD1	LEU	1808	13.896	-43.565	37.130	1.00	27.41
ATOM	12016	CD2	LEU	1808	15.658	-45.247	37.649	1.00	26.23
ATOM	12017	C	LEU	1808	18.218	-43.719	35.984	1.00	17.67
ATOM	12018	O	LEU	1808	18.294	-44.934	35.797	1.00	16.92
ATOM	12019	N	LEU	1809	18.528	-42.831	35.047	1.00	16.05
ATOM	12020	CA	LEU	1809	19.006	-43.273	33.740	1.00	15.75
ATOM	12021	CB	LEU	1809	19.110	-42.089	32.772	1.00	13.68
ATOM	12022	CG	LEU	1809	17.811	-41.302	32.527	1.00	16.26
ATOM	12023	CD1	LEU	1809	18.026	-40.320	31.380	1.00	11.13
ATOM	12024	CD2	LEU	1809	16.672	-42.238	32.202	1.00	15.56
ATOM	12025	C	LEU	1809	20.363	-43.936	33.900	1.00	16.76
ATOM	12026	O	LEU	1809	20.643	-44.952	33.267	1.00	17.33
ATOM	12027	N	GLN	1810	21.207	-43.363	34.752	1.00	18.12
ATOM	12028	CA	GLN	1810	22.526	-43.943	34.978	1.00	19.74
ATOM	12029	CB	GLN	1810	23.325	-43.078	35.957	1.00	22.02
ATOM	12030	CG	GLN	1810	24.818	-43.410	36.021	1.00	24.70
ATOM	12031	CD	GLN	1810	25.527	-43.270	34.676	1.00	24.85
ATOM	12032	OE1	GLN	1810	25.549	-44.197	33.869	1.00	26.62
ATOM	12033	NE2	GLN	1810	26.100	-42.101	34.430	1.00	25.00
ATOM	12034	C	GLN	1810	22.345	-45.363	35.520	1.00	20.60
ATOM	12035	O	GLN	1810	23.081	-46.275	35.142	1.00	19.97
ATOM	12036	N	LYS	1811	21.356	-45.553	36.391	1.00	20.73
ATOM	12037	CA	LYS	1811	21.088	-46.881	36.952	1.00	22.94
ATOM	12038	CB	LYS	1811	19.960	-46.825	37.989	1.00	25.60
ATOM	12039	CG	LYS	1811	19.688	-48.183	38.647	1.00	30.12
ATOM	12040	CD	LYS	1811	18.259	-48.325	39.172	1.00	34.97

ATOM	12041	CE	LYS	1811	17.969	-47.428	40.368	1.00	37.63
ATOM	12042	NZ	LYS	1811	16.572	-47.640	40.868	1.00	38.97
ATOM	12043	C	LYS	1811	20.677	-47.820	35.822	1.00	22.37
ATOM	12044	O	LYS	1811	21.130	-48.965	35.750	1.00	23.23
ATOM	12045	N	TYR	1812	19.803	-47.327	34.948	1.00	20.19
ATOM	12046	CA	TYR	1812	19.328	-48.108	33.806	1.00	19.41
ATOM	12047	CB	TYR	1812	18.394	-47.252	32.939	1.00	20.86
ATOM	12048	CG	TYR	1812	17.008	-47.048	33.529	1.00	23.68
ATOM	12049	CD1	TYR	1812	16.100	-46.165	32.941	1.00	25.01
ATOM	12050	CE1	TYR	1812	14.810	-46.011	33.456	1.00	28.32
ATOM	12051	CD2	TYR	1812	16.590	-47.769	34.650	1.00	25.69
ATOM	12052	CE2	TYR	1812	15.307	-47.623	35.169	1.00	26.94
ATOM	12053	CZ	TYR	1812	14.424	-46.748	34.568	1.00	27.83
ATOM	12054	OH	TYR	1812	13.147	-46.626	35.067	1.00	33.55
ATOM	12055	C	TYR	1812	20.488	-48.620	32.960	1.00	19.49
ATOM	12056	O	TYR	1812	20.478	-49.768	32.508	1.00	18.51
ATOM	12057	N	LYS	1813	21.486	-47.768	32.739	1.00	18.22
ATOM	12058	CA	LYS	1813	22.641	-48.177	31.950	1.00	18.58
ATOM	12059	CB	LYS	1813	23.577	-46.993	31.679	1.00	17.18
ATOM	12060	CG	LYS	1813	24.847	-47.399	30.924	1.00	14.61
ATOM	12061	CD	LYS	1813	25.545	-46.214	30.288	1.00	14.45
ATOM	12062	CE	LYS	1813	26.783	-46.661	29.524	1.00	13.10
ATOM	12063	NZ	LYS	1813	26.884	-45.976	28.193	1.00	12.51
ATOM	12064	C	LYS	1813	23.398	-49.284	32.688	1.00	19.88
ATOM	12065	O	LYS	1813	23.840	-50.247	32.076	1.00	19.85
ATOM	12066	N	GLN	1814	23.541	-49.144	34.001	1.00	23.03
ATOM	12067	CA	GLN	1814	24.238	-50.156	34.785	1.00	26.55
ATOM	12068	CB	GLN	1814	24.399	-49.695	36.229	1.00	30.23
ATOM	12069	CG	GLN	1814	25.271	-48.461	36.380	1.00	36.91
ATOM	12070	CD	GLN	1814	25.444	-48.052	37.827	1.00	40.35
ATOM	12071	OE1	GLN	1814	25.895	-48.843	38.655	1.00	43.65
ATOM	12072	NE2	GLN	1814	25.087	-46.811	38.142	1.00	43.19
ATOM	12073	C	GLN	1814	23.481	-51.480	34.745	1.00	26.92
ATOM	12074	O	GLN	1814	24.086	-52.553	34.697	1.00	29.93
ATOM	12075	N	GLU	1815	22.155	-51.402	34.756	1.00	26.78
ATOM	12076	CA	GLU	1815	21.313	-52.595	34.720	1.00	26.97
ATOM	12077	CB	GLU	1815	19.947	-52.290	35.342	1.00	29.31
ATOM	12078	CG	GLU	1815	20.023	-51.678	36.735	1.00	35.92
ATOM	12079	CD	GLU	1815	18.652	-51.375	37.325	1.00	38.20
ATOM	12080	OE1	GLU	1815	17.878	-50.624	36.694	1.00	40.52
ATOM	12081	OE2	GLU	1815	18.352	-51.886	38.424	1.00	42.17
ATOM	12082	C	GLU	1815	21.118	-53.075	33.285	1.00	24.86
ATOM	12083	O	GLU	1815	20.503	-54.113	33.048	1.00	24.50
ATOM	12084	N	LYS	1816	21.651	-52.318	32.331	1.00	23.60
ATOM	12085	CA	LYS	1816	21.516	-52.653	30.920	1.00	24.10
ATOM	12086	CB	LYS	1816	22.168	-54.012	30.619	1.00	27.06
ATOM	12087	CG	LYS	1816	23.690	-53.956	30.494	1.00	29.88
ATOM	12088	CD	LYS	1816	24.106	-53.130	29.280	1.00	33.12
ATOM	12089	CE	LYS	1816	25.622	-52.924	29.206	1.00	34.77
ATOM	12090	NZ	LYS	1816	26.378	-54.205	29.060	1.00	36.10
ATOM	12091	C	LYS	1816	20.048	-52.658	30.491	1.00	23.58
ATOM	12092	O	LYS	1816	19.635	-53.456	29.650	1.00	22.90
ATOM	12093	N	LYS	1817	19.258	-51.763	31.081	1.00	22.10
ATOM	12094	CA	LYS	1817	17.847	-51.649	30.730	1.00	19.64
ATOM	12095	CB	LYS	1817	16.982	-51.432	31.973	1.00	23.35
ATOM	12096	CG	LYS	1817	15.498	-51.274	31.636	1.00	26.44
ATOM	12097	CD	LYS	1817	14.682	-50.726	32.801	1.00	30.23
ATOM	12098	CE	LYS	1817	14.649	-51.683	33.980	1.00	33.21
ATOM	12099	NZ	LYS	1817	13.841	-51.115	35.101	1.00	36.99
ATOM	12100	C	LYS	1817	17.655	-50.463	29.790	1.00	19.22
ATOM	12101	O	LYS	1817	17.761	-49.311	30.212	1.00	15.14
ATOM	12102	N	ARG	1818	17.373	-50.756	28.523	1.00	17.56
ATOM	12103	CA	ARG	1818	17.165	-49.723	27.515	1.00	17.68
ATOM	12104	CB	ARG	1818	17.122	-50.354	26.121	1.00	17.01
ATOM	12105	CG	ARG	1818	18.516	-50.558	25.563	1.00	20.64
ATOM	12106	CD	ARG	1818	18.534	-51.433	24.331	1.00	26.16
ATOM	12107	NE	ARG	1818	18.303	-52.836	24.671	1.00	27.97
ATOM	12108	CZ	ARG	1818	18.504	-53.847	23.833	1.00	30.30
ATOM	12109	NH1	ARG	1818	18.942	-53.611	22.602	1.00	31.08
ATOM	12110	NH2	ARG	1818	18.266	-55.091	24.223	1.00	30.79
ATOM	12111	C	ARG	1818	15.898	-48.939	27.800	1.00	16.78
ATOM	12112	O	ARG	1818	14.858	-49.522	28.107	1.00	17.29
ATOM	12113	N	PHE	1819	15.986	-47.615	27.695	1.00	15.71
ATOM	12114	CA	PHE	1819	14.849	-46.764	28.005	1.00	13.45
ATOM	12115	CB	PHE	1819	15.167	-45.940	29.258	1.00	12.38
ATOM	12116	CG	PHE	1819	16.395	-45.082	29.135	1.00	10.54
ATOM	12117	CD1	PHE	1819	16.302	-43.780	28.653	1.00	10.46

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ATOM   12118  CD2 PHE   1819      17.648 -45.576  29.494  1.00 11.28
ATOM   12119  CE1 PHE   1819      17.434 -42.980  28.540  1.00 10.02
ATOM   12120  CE2 PHE   1819      18.790 -44.782  29.384  1.00 12.19
ATOM   12121  CZ  PHE   1819      18.684 -43.484  28.903  1.00 10.00
ATOM   12122  C   PHE   1819      14.405 -45.848  26.877  1.00 12.26
ATOM   12123  O   PHE   1819      15.214 -45.404  26.057  1.00 11.06
ATOM   12124  N   ALA   1820      13.105 -45.572  26.850  1.00 11.30
ATOM   12125  CA  ALA   1820      12.525 -44.715  25.833  1.00 11.83
ATOM   12126  CB  ALA   1820      11.114 -45.203  25.470  1.00 10.93
ATOM   12127  C   ALA   1820      12.464 -43.256  26.262  1.00 11.52
ATOM   12128  O   ALA   1820      12.287 -42.945  27.441  1.00 13.43
ATOM   12129  N   THR   1821      12.598 -42.372  25.277  1.00 11.00
ATOM   12130  CA  THR   1821      12.552 -40.928  25.481  1.00 11.82
ATOM   12131  CB  THR   1821      13.973 -40.321  25.403  1.00 11.47
ATOM   12132  OG1 THR   1821      14.756 -40.809  26.505  1.00 15.36
ATOM   12133  CG2 THR   1821      13.913 -38.816  25.451  1.00 23.24
ATOM   12134  C   THR   1821      11.706 -40.398  24.331  1.00  9.33
ATOM   12135  O   THR   1821      11.554 -41.075  23.312  1.00 12.52
ATOM   12136  N   ILE   1822      11.150 -39.201  24.465  1.00 10.58
ATOM   12137  CA  ILE   1822      10.315 -38.690  23.385  1.00  9.32
ATOM   12138  CB  ILE   1822       8.892 -39.296  23.504  1.00 10.75
ATOM   12139  CG2 ILE   1822       8.162 -38.672  24.716  1.00 10.54
ATOM   12140  CG1 ILE   1822       8.102 -39.050  22.222  1.00 13.24
ATOM   12141  CD1 ILE   1822       6.801 -39.836  22.165  1.00 14.23
ATOM   12142  C   ILE   1822      10.237 -37.169  23.415  1.00 12.04
ATOM   12143  O   ILE   1822      10.473 -36.552  24.456  1.00  9.11
ATOM   12144  N   THR   1823       9.926 -36.565  22.269  1.00 10.88
ATOM   12145  CA  THR   1823       9.778 -35.119  22.212  1.00 12.73
ATOM   12146  CB  THR   1823       9.990 -34.570  20.766  1.00 11.54
ATOM   12147  OG1 THR   1823       9.000 -35.126  19.889  1.00 12.04
ATOM   12148  CG2 THR   1823      11.393 -34.936  20.259  1.00 14.24
ATOM   12149  C   THR   1823       8.359 -34.785  22.681  1.00 12.09
ATOM   12150  O   THR   1823       7.436 -35.591  22.546  1.00 11.41
ATOM   12151  N   ALA   1824       8.203 -33.599  23.257  1.00 10.84
ATOM   12152  CA  ALA   1824       6.912 -33.134  23.756  1.00 10.40
ATOM   12153  CB  ALA   1824       6.659 -33.673  25.173  1.00  9.05
ATOM   12154  C   ALA   1824       6.973 -31.604  23.776  1.00 10.44
ATOM   12155  O   ALA   1824       8.015 -31.023  24.087  1.00  9.73
ATOM   12156  N   TYR   1825       5.867 -30.947  23.445  1.00  9.09
ATOM   12157  CA  TYR   1825       5.864 -29.483  23.405  1.00 10.72
ATOM   12158  CB  TYR   1825       6.002 -28.995  21.960  1.00  9.65
ATOM   12159  CG  TYR   1825       7.028 -29.745  21.159  1.00 10.96
ATOM   12160  CD1 TYR   1825       6.640 -30.696  20.226  1.00 13.24
ATOM   12161  CE1 TYR   1825       7.578 -31.379  19.466  1.00 13.61
ATOM   12162  CD2 TYR   1825       8.389 -29.496  21.323  1.00 11.25
ATOM   12163  CE2 TYR   1825       9.341 -30.180  20.569  1.00 10.63
ATOM   12164  CZ  TYR   1825       8.919 -31.116  19.642  1.00 12.50
ATOM   12165  OH  TYR   1825       9.842 -31.782  18.876  1.00 13.92
ATOM   12166  C   TYR   1825       4.614 -28.854  23.994  1.00 11.54
ATOM   12167  O   TYR   1825       4.427 -27.642  23.906  1.00 12.75
ATOM   12168  N   ASP   1826       3.755 -29.666  24.592  1.00  9.86
ATOM   12169  CA  ASP   1826       2.532 -29.141  25.170  1.00 12.59
ATOM   12170  CB  ASP   1826       1.454 -29.020  24.084  1.00 10.93
ATOM   12171  CG  ASP   1826       1.095 -30.362  23.471  1.00 13.46
ATOM   12172  OD1 ASP   1826       0.357 -31.125  24.116  1.00 12.97
ATOM   12173  OD2 ASP   1826       1.569 -30.656  22.356  1.00 14.57
ATOM   12174  C   ASP   1826       2.038 -30.007  26.325  1.00 11.01
ATOM   12175  O   ASP   1826       2.516 -31.120  26.549  1.00 12.69
ATOM   12176  N   TYR   1827       1.077 -29.469  27.060  1.00 11.39
ATOM   12177  CA  TYR   1827       0.497 -30.145  28.212  1.00 11.45
ATOM   12178  CB  TYR   1827      -0.513 -29.212  28.879  1.00 12.27
ATOM   12179  CG  TYR   1827      -1.358 -29.886  29.937  1.00 12.69
ATOM   12180  CD1 TYR   1827      -0.912 -29.990  31.255  1.00 14.43
ATOM   12181  CE1 TYR   1827      -1.696 -30.593  32.234  1.00 15.64
ATOM   12182  CD2 TYR   1827      -2.610 -30.407  29.622  1.00 14.53
ATOM   12183  CE2 TYR   1827      -3.401 -31.015  30.593  1.00 17.16
ATOM   12184  CZ  TYR   1827      -2.937 -31.101  31.893  1.00 16.99
ATOM   12185  OH  TYR   1827      -3.714 -31.686  32.861  1.00 16.74
ATOM   12186  C   TYR   1827      -0.194 -31.483  27.921  1.00 11.79
ATOM   12187  O   TYR   1827       0.010 -32.474  28.632  1.00 10.69
ATOM   12188  N   SER   1828      -1.026 -31.506  26.887  1.00  9.98
ATOM   12189  CA  SER   1828      -1.779 -32.713  26.553  1.00 12.49
ATOM   12190  CB  SER   1828      -2.744 -32.415  25.407  1.00 11.71
ATOM   12191  OG  SER   1828      -3.657 -31.420  25.819  1.00 16.55
ATOM   12192  C   SER   1828      -0.940 -33.940  26.240  1.00 11.86
ATOM   12193  O   SER   1828      -1.210 -35.027  26.763  1.00  9.82
ATOM   12194  N   PHE   1829       0.075 -33.780  25.401  1.00 11.47
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ATOM  12195  CA   PHE  1829      0.921 -34.918  25.082  1.00 11.15
ATOM  12196  CB   PHE  1829      1.675 -34.690  23.760  1.00 10.81
ATOM  12197  CG   PHE  1829      0.831 -34.948  22.535  1.00 10.15
ATOM  12198  CD1  PHE  1829      0.259 -33.893  21.827  1.00 10.05
ATOM  12199  CD2  PHE  1829      0.566 -36.256  22.120  1.00  9.31
ATOM  12200  CE1  PHE  1829     -0.570 -34.134  20.723  1.00  9.40
ATOM  12201  CE2  PHE  1829     -0.259 -36.512  21.022  1.00 10.09
ATOM  12202  CZ   PHE  1829     -0.831 -35.451  20.317  1.00  9.43
ATOM  12203  C    PHE  1829      1.882 -35.224  26.241  1.00 11.61
ATOM  12204  O    PHE  1829      2.161 -36.391  26.531  1.00  9.86
ATOM  12205  N    ALA  1830      2.366 -34.199  26.939  1.00  9.53
ATOM  12206  CA   ALA  1830      3.269 -34.475  28.057  1.00 11.06
ATOM  12207  CB   ALA  1830      3.810 -33.168  28.663  1.00 13.38
ATOM  12208  C    ALA  1830      2.535 -35.284  29.131  1.00 12.72
ATOM  12209  O    ALA  1830      3.116 -36.172  29.759  1.00 12.34
ATOM  12210  N    LYS  1831      1.260 -34.963  29.336  1.00 10.44
ATOM  12211  CA   LYS  1831      0.435 -35.645  30.324  1.00 12.92
ATOM  12212  CB   LYS  1831     -0.884 -34.886  30.502  1.00 15.79
ATOM  12213  CG   LYS  1831     -1.892 -35.560  31.418  1.00 19.79
ATOM  12214  CD   LYS  1831     -1.386 -35.636  32.837  1.00 26.44
ATOM  12215  CE   LYS  1831     -2.551 -35.751  33.817  1.00 30.84
ATOM  12216  NZ   LYS  1831     -3.543 -36.796  33.410  1.00 32.55
ATOM  12217  C    LYS  1831      0.151 -37.071  29.866  1.00 10.03
ATOM  12218  O    LYS  1831      0.202 -38.026  30.658  1.00 10.29
ATOM  12219  N    LEU  1832     -0.158 -37.211  28.582  1.00  9.47
ATOM  12220  CA   LEU  1832     -0.449 -38.529  28.017  1.00 10.13
ATOM  12221  CB   LEU  1832     -0.811 -38.397  26.532  1.00  9.08
ATOM  12222  CG   LEU  1832     -1.337 -39.651  25.819  1.00  7.77
ATOM  12223  CD1  LEU  1832     -2.165 -39.212  24.629  1.00 10.73
ATOM  12224  CD2  LEU  1832     -0.187 -40.548  25.370  1.00  8.84
ATOM  12225  C    LEU  1832      0.764 -39.434  28.195  1.00 11.17
ATOM  12226  O    LEU  1832      0.632 -40.583  28.619  1.00 10.67
ATOM  12227  N    PHE  1833      1.948 -38.907  27.888  1.00  9.31
ATOM  12228  CA   PHE  1833      3.175 -39.690  28.021  1.00 10.32
ATOM  12229  CB   PHE  1833      4.385 -38.928  27.453  1.00 12.77
ATOM  12230  CG   PHE  1833      4.253 -38.554  25.983  1.00 10.12
ATOM  12231  CD1  PHE  1833      3.502 -39.331  25.105  1.00  9.09
ATOM  12232  CD2  PHE  1833      4.898 -37.427  25.483  1.00 11.46
ATOM  12233  CE1  PHE  1833      3.393 -38.989  23.746  1.00  9.84
ATOM  12234  CE2  PHE  1833      4.798 -37.074  24.125  1.00  9.94
ATOM  12235  CZ   PHE  1833      4.041 -37.860  23.254  1.00  8.51
ATOM  12236  C    PHE  1833      3.438 -40.043  29.486  1.00 11.08
ATOM  12237  O    PHE  1833      3.687 -41.204  29.810  1.00 11.34
ATOM  12238  N    ALA  1834      3.392 -39.045  30.369  1.00 11.64
ATOM  12239  CA   ALA  1834      3.631 -39.285  31.792  1.00 12.54
ATOM  12240  CB   ALA  1834      3.480 -37.973  32.590  1.00 15.99
ATOM  12241  C    ALA  1834      2.692 -40.349  32.367  1.00 14.96
ATOM  12242  O    ALA  1834      3.120 -41.206  33.150  1.00 13.96
ATOM  12243  N    ASP  1835      1.419 -40.313  31.981  1.00 14.27
ATOM  12244  CA   ASP  1835      0.468 -41.290  32.501  1.00 16.50
ATOM  12245  CB   ASP  1835     -0.968 -40.917  32.133  1.00 20.28
ATOM  12246  CG   ASP  1835     -1.457 -39.671  32.850  1.00 20.37
ATOM  12247  OD1  ASP  1835     -0.859 -39.275  33.875  1.00 22.29
ATOM  12248  OD2  ASP  1835     -2.457 -39.096  32.388  1.00 25.23
ATOM  12249  C    ASP  1835      0.734 -42.723  32.048  1.00 16.31
ATOM  12250  O    ASP  1835      0.176 -43.671  32.612  1.00 14.66
ATOM  12251  N    GLU  1836      1.571 -42.891  31.028  1.00 15.72
ATOM  12252  CA   GLU  1836      1.905 -44.234  30.557  1.00 14.86
ATOM  12253  CB   GLU  1836      1.966 -44.289  29.024  1.00 13.08
ATOM  12254  CG   GLU  1836      0.634 -44.045  28.334  1.00 13.80
ATOM  12255  CD   GLU  1836     -0.468 -44.917  28.905  1.00 18.45
ATOM  12256  OE1  GLU  1836     -0.221 -46.126  29.116  1.00 18.78
ATOM  12257  OE2  GLU  1836     -1.578 -44.395  29.144  1.00 18.26
ATOM  12258  C    GLU  1836      3.246 -44.688  31.123  1.00 15.46
ATOM  12259  O    GLU  1836      3.632 -45.844  30.970  1.00 16.15
ATOM  12260  N    GLY  1837      3.962 -43.770  31.762  1.00 13.82
ATOM  12261  CA   GLY  1837      5.252 -44.112  32.336  1.00 14.92
ATOM  12262  C    GLY  1837      6.442 -43.693  31.494  1.00 14.40
ATOM  12263  O    GLY  1837      7.567 -44.113  31.761  1.00 14.75
ATOM  12264  N    LEU  1838      6.197 -42.879  30.466  1.00 14.07
ATOM  12265  CA   LEU  1838      7.263 -42.384  29.588  1.00 16.57
ATOM  12266  CB   LEU  1838      6.703 -42.123  28.188  1.00 18.28
ATOM  12267  CG   LEU  1838      7.637 -42.371  27.005  1.00 21.26
ATOM  12268  CD1  LEU  1838      6.977 -41.842  25.744  1.00 18.89
ATOM  12269  CD2  LEU  1838      8.983 -41.721  27.225  1.00 20.44
ATOM  12270  C    LEU  1838      7.642 -41.073  30.267  1.00 17.17
ATOM  12271  O    LEU  1838      7.054 -40.024  29.987  1.00 16.93
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ATOM	12272	N	ASN	1839	8.632	-41.160	31.152	1.00	19.21
ATOM	12273	CA	ASN	1839	9.066	-40.046	31.981	1.00	17.01
ATOM	12274	CB	ASN	1839	9.234	-40.551	33.423	1.00	20.88
ATOM	12275	CG	ASN	1839	8.011	-41.318	33.927	1.00	24.27
ATOM	12276	OD1	ASN	1839	6.867	-40.885	33.742	1.00	27.75
ATOM	12277	ND2	ASN	1839	8.248	-42.452	34.577	1.00	26.34
ATOM	12278	C	ASN	1839	10.317	-39.276	31.567	1.00	15.58
ATOM	12279	O	ASN	1839	10.956	-38.627	32.397	1.00	15.41
ATOM	12280	N	VAL	1840	10.684	-39.347	30.296	1.00	14.55
ATOM	12281	CA	VAL	1840	11.841	-38.607	29.830	1.00	13.23
ATOM	12282	CB	VAL	1840	13.027	-39.528	29.518	1.00	13.11
ATOM	12283	CG1	VAL	1840	14.221	-38.694	29.118	1.00	13.44
ATOM	12284	CG2	VAL	1840	13.348	-40.392	30.748	1.00	16.08
ATOM	12285	C	VAL	1840	11.409	-37.884	28.573	1.00	12.06
ATOM	12286	O	VAL	1840	11.116	-38.505	27.547	1.00	10.12
ATOM	12287	N	MET	1841	11.367	-36.562	28.663	1.00	10.19
ATOM	12288	CA	MET	1841	10.909	-35.758	27.548	1.00	10.11
ATOM	12289	CB	MET	1841	9.522	-35.193	27.873	1.00	12.54
ATOM	12290	CG	MET	1841	8.452	-36.273	27.916	1.00	15.69
ATOM	12291	SD	MET	1841	6.923	-35.649	28.511	1.00	15.98
ATOM	12292	CE	MET	1841	6.633	-36.759	29.903	1.00	13.37
ATOM	12293	C	MET	1841	11.864	-34.647	27.150	1.00	10.13
ATOM	12294	O	MET	1841	12.468	-33.969	27.992	1.00	9.95
ATOM	12295	N	LEU	1842	11.959	-34.456	25.839	1.00	10.43
ATOM	12296	CA	LEU	1842	12.838	-33.454	25.264	1.00	11.43
ATOM	12297	CB	LEU	1842	13.804	-34.123	24.283	1.00	14.79
ATOM	12298	CG	LEU	1842	14.979	-33.359	23.651	1.00	20.32
ATOM	12299	CD1	LEU	1842	14.650	-33.033	22.220	1.00	23.15
ATOM	12300	CD2	LEU	1842	15.339	-32.102	24.428	1.00	19.90
ATOM	12301	C	LEU	1842	12.060	-32.349	24.566	1.00	11.63
ATOM	12302	O	LEU	1842	11.246	-32.610	23.687	1.00	9.65
ATOM	12303	N	VAL	1843	12.299	-31.115	25.001	1.00	11.18
ATOM	12304	CA	VAL	1843	11.670	-29.947	24.395	1.00	12.10
ATOM	12305	CB	VAL	1843	11.215	-28.917	25.454	1.00	12.21
ATOM	12306	CG1	VAL	1843	10.567	-27.708	24.763	1.00	10.58
ATOM	12307	CG2	VAL	1843	10.212	-29.564	26.405	1.00	15.96
ATOM	12308	C	VAL	1843	12.800	-29.383	23.548	1.00	13.23
ATOM	12309	O	VAL	1843	13.601	-28.580	24.019	1.00	13.64
ATOM	12310	N	GLY	1844	12.877	-29.837	22.302	1.00	14.75
ATOM	12311	CA	GLY	1844	13.950	-29.406	21.424	1.00	15.77
ATOM	12312	C	GLY	1844	13.563	-28.393	20.375	1.00	13.72
ATOM	12313	O	GLY	1844	12.376	-28.167	20.127	1.00	11.89
ATOM	12314	N	ASP	1845	14.559	-27.781	19.742	1.00	14.76
ATOM	12315	CA	ASP	1845	14.246	-26.776	18.732	1.00	14.86
ATOM	12316	CB	ASP	1845	15.485	-25.952	18.342	1.00	16.86
ATOM	12317	CG	ASP	1845	16.649	-26.794	17.857	1.00	17.94
ATOM	12318	OD1	ASP	1845	16.470	-27.985	17.559	1.00	16.65
ATOM	12319	OD2	ASP	1845	17.757	-26.227	17.768	1.00	19.70
ATOM	12320	C	ASP	1845	13.567	-27.368	17.506	1.00	14.35
ATOM	12321	O	ASP	1845	13.185	-26.641	16.588	1.00	14.70
ATOM	12322	N	SER	1846	13.401	-28.689	17.493	1.00	14.18
ATOM	12323	CA	SER	1846	12.699	-29.334	16.385	1.00	12.45
ATOM	12324	CB	SER	1846	12.615	-30.848	16.607	1.00	14.08
ATOM	12325	OG	SER	1846	12.079	-31.168	17.888	1.00	16.33
ATOM	12326	C	SER	1846	11.291	-28.735	16.337	1.00	12.85
ATOM	12327	O	SER	1846	10.600	-28.821	15.316	1.00	13.17
ATOM	12328	N	LEU	1847	10.858	-28.146	17.451	1.00	10.11
ATOM	12329	CA	LEU	1847	9.532	-27.517	17.503	1.00	9.80
ATOM	12330	CB	LEU	1847	9.242	-26.969	18.911	1.00	8.90
ATOM	12331	CG	LEU	1847	10.043	-25.770	19.432	1.00	9.46
ATOM	12332	CD1	LEU	1847.	9.440	-24.474	18.904	1.00	6.94
ATOM	12333	CD2	LEU	1847	10.039	-25.763	20.968	1.00	10.36
ATOM	12334	C	LEU	1847	9.436	-26.391	16.466	1.00	8.37
ATOM	12335	O	LEU	1847	8.341	-26.001	16.051	1.00	9.72
ATOM	12336	N	GLY	1848	10.585	-25.861	16.060	1.00	7.80
ATOM	12337	CA	GLY	1848	10.594	-24.804	15.061	1.00	9.90
ATOM	12338	C	GLY	1848	9.921	-25.270	13.783	1.00	12.28
ATOM	12339	O	GLY	1848	9.277	-24.495	13.077	1.00	11.95
ATOM	12340	N	MET	1849	10.048	-26.556	13.485	1.00	12.66
ATOM	12341	CA	MET	1849	9.446	-27.088	12.273	1.00	14.41
ATOM	12342	CB	MET	1849	10.406	-28.092	11.641	1.00	18.14
ATOM	12343	CG	MET	1849	11.766	-27.472	11.327	1.00	19.85
ATOM	12344	SD	MET	1849	12.956	-28.634	10.655	1.00	24.17
ATOM	12345	CE	MET	1849	12.389	-28.777	8.968	1.00	24.76
ATOM	12346	C	MET	1849	8.093	-27.724	12.538	1.00	12.05
ATOM	12347	O	MET	1849	7.097	-27.396	11.893	1.00	13.07
ATOM	12348	N	THR	1850	8.052	-28.613	13.518	1.00	13.89

ATOM	12349	CA	THR	1850	6.826	-29.321	13.852	1.00	13.07
ATOM	12350	CB	THR	1850	7.165	-30.523	14.756	1.00	16.49
ATOM	12351	OG1	THR	1850	6.003	-31.332	14.935	1.00	23.16
ATOM	12352	CG2	THR	1850	7.657	-30.044	16.106	1.00	13.78
ATOM	12353	C	THR	1850	5.722	-28.477	14.502	1.00	13.45
ATOM	12354	O	THR	1850	4.529	-28.704	14.272	1.00	14.06
ATOM	12355	N	VAL	1851	6.101	-27.505	15.318	1.00	9.38
ATOM	12356	CA	VAL	1851	5.095	-26.662	15.963	1.00	10.18
ATOM	12357	CB	VAL	1851	5.447	-26.405	17.456	1.00	9.38
ATOM	12358	CG1	VAL	1851	4.436	-25.440	18.073	1.00	9.31
ATOM	12359	CG2	VAL	1851	5.440	-27.719	18.219	1.00	9.77
ATOM	12360	C	VAL	1851	4.914	-25.316	15.262	1.00	10.37
ATOM	12361	O	VAL	1851	3.795	-24.940	14.935	1.00	10.77
ATOM	12362	N	GLN	1852	6.017	-24.604	15.025	1.00	9.98
ATOM	12363	CA	GLN	1852	5.959	-23.283	14.405	1.00	10.14
ATOM	12364	CB	GLN	1852	7.198	-22.486	14.801	1.00	10.92
ATOM	12365	CG	GLN	1852	7.379	-22.402	16.313	1.00	11.64
ATOM	12366	CD	GLN	1852	8.590	-21.591	16.702	1.00	11.56
ATOM	12367	OE1	GLN	1852	9.567	-21.530	15.963	1.00	11.26
ATOM	12368	NE2	GLN	1852	8.545	-20.990	17.882	1.00	8.34
ATOM	12369	C	GLN	1852	5.804	-23.277	12.891	1.00	11.52
ATOM	12370	O	GLN	1852	5.301	-22.314	12.315	1.00	10.45
ATOM	12371	N	GLY	1853	6.257	-24.340	12.239	1.00	9.89
ATOM	12372	CA	GLY	1853	6.119	-24.422	10.793	1.00	10.59
ATOM	12373	C	GLY	1853	7.217	-23.823	9.941	1.00	11.71
ATOM	12374	O	GLY	1853	6.991	-23.534	8.766	1.00	12.91
ATOM	12375	N	HIS	1854	8.395	-23.618	10.522	1.00	11.61
ATOM	12376	CA	HIS	1854	9.527	-23.076	9.768	1.00	14.51
ATOM	12377	CB	HIS	1854	10.534	-22.413	10.704	1.00	12.24
ATOM	12378	CG	HIS	1854	9.987	-21.230	11.432	1.00	13.00
ATOM	12379	CD2	HIS	1854	9.726	-21.033	12.747	1.00	11.78
ATOM	12380	ND1	HIS	1854	9.636	-20.060	10.792	1.00	11.06
ATOM	12381	CE1	HIS	1854	9.186	-19.193	11.682	1.00	13.39
ATOM	12382	NE2	HIS	1854	9.231	-19.758	12.875	1.00	12.54
ATOM	12383	C	HIS	1854	10.210	-24.225	9.037	1.00	15.33
ATOM	12384	O	HIS	1854	10.034	-25.389	9.395	1.00	14.84
ATOM	12385	N	ASP	1855	11.005	-23.888	8.028	1.00	18.03
ATOM	12386	CA	ASP	1855	11.718	-24.871	7.224	1.00	20.65
ATOM	12387	CB	ASP	1855	12.081	-24.247	5.871	1.00	26.04
ATOM	12388	CG	ASP	1855	13.150	-23.172	5.999	1.00	27.76
ATOM	12389	OD1	ASP	1855	14.313	-23.526	6.253	1.00	35.96
ATOM	12390	OD2	ASP	1855	12.827	-21.977	5.864	1.00	34.52
ATOM	12391	C	ASP	1855	12.993	-25.347	7.928	1.00	19.44
ATOM	12392	O	ASP	1855	13.645	-26.288	7.477	1.00	17.58
ATOM	12393	N	SER	1856	13.352	-24.685	9.026	1.00	17.83
ATOM	12394	CA	SER	1856	14.540	-25.050	9.794	1.00	15.27
ATOM	12395	CB	SER	1856	15.762	-24.257	9.323	1.00	16.75
ATOM	12396	OG	SER	1856	15.761	-22.953	9.884	1.00	13.49
ATOM	12397	C	SER	1856	14.289	-24.735	11.260	1.00	14.46
ATOM	12398	O	SER	1856	13.259	-24.163	11.613	1.00	13.21
ATOM	12399	N	THR	1857	15.244	-25.085	12.111	1.00	15.25
ATOM	12400	CA	THR	1857	15.094	-24.823	13.536	1.00	14.62
ATOM	12401	CB	THR	1857	15.712	-25.947	14.392	1.00	15.79
ATOM	12402	OG1	THR	1857	17.125	-25.993	14.169	1.00	14.91
ATOM	12403	CG2	THR	1857	15.106	-27.286	14.042	1.00	15.97
ATOM	12404	C	THR	1857	15.759	-23.516	13.964	1.00	12.81
ATOM	12405	O	THR	1857	15.666	-23.145	15.128	1.00	13.80
ATOM	12406	N	LEU	1858	16.425	-22.815	13.047	1.00	12.35
ATOM	12407	CA	LEU	1858	17.119	-21.582	13.434	1.00	12.54
ATOM	12408	CB	LEU	1858	17.920	-21.013	12.252	1.00	12.41
ATOM	12409	CG	LEU	1858	19.243	-21.743	11.959	1.00	18.92
ATOM	12410	CD1	LEU	1858	18.942	-23.123	11.376	1.00	18.27
ATOM	12411	CD2	LEU	1858	20.079	-20.929	10.975	1.00	16.42
ATOM	12412	C	LEU	1858	16.269	-20.465	14.049	1.00	12.00
ATOM	12413	O	LEU	1858	16.729	-19.749	14.943	1.00	12.79
ATOM	12414	N	PRO	1859	15.021	-20.296	13.587	1.00	11.97
ATOM	12415	CD	PRO	1859	14.411	-20.851	12.366	1.00	15.36
ATOM	12416	CA	PRO	1859	14.190	-19.228	14.159	1.00	12.87
ATOM	12417	CB	PRO	1859	12.981	-19.178	13.222	1.00	14.66
ATOM	12418	CG	PRO	1859	12.969	-20.528	12.567	1.00	20.26
ATOM	12419	C	PRO	1859	13.789	-19.393	15.623	1.00	12.26
ATOM	12420	O	PRO	1859	13.431	-18.418	16.287	1.00	11.90
ATOM	12421	N	VAL	1860	13.853	-20.620	16.125	1.00	9.89
ATOM	12422	CA	VAL	1860	13.487	-20.900	17.514	1.00	9.80
ATOM	12423	CB	VAL	1860	13.650	-22.397	17.824	1.00	9.99
ATOM	12424	CG1	VAL	1860	13.225	-22.674	19.258	1.00	10.58
ATOM	12425	CG2	VAL	1860	12.816	-23.222	16.855	1.00	10.13

ATOM	12426	C	VAL	1860	14.343	-20.116	18.507	1.00	9.52
ATOM	12427	O	VAL	1860	15.570	-20.165	18.449	1.00	9.57
ATOM	12428	N	THR	1861	13.691	-19.419	19.435	1.00	9.74
ATOM	12429	CA	THR	1861	14.412	-18.633	20.432	1.00	12.01
ATOM	12430	CB	THR	1861	13.845	-17.199	20.509	1.00	15.97
ATOM	12431	OG1	THR	1861	13.816	-16.623	19.192	1.00	20.58
ATOM	12432	CG2	THR	1861	14.722	-16.325	21.387	1.00	23.39
ATOM	12433	C	THR	1861	14.367	-19.270	21.822	1.00	11.32
ATOM	12434	O	THR	1861	13.603	-20.199	22.072	1.00	9.35
ATOM	12435	N	VAL	1862	15.214	-18.773	22.717	1.00	11.39
ATOM	12436	CA	VAL	1862	15.251	-19.275	24.079	1.00	11.60
ATOM	12437	CB	VAL	1862	16.309	-18.524	24.920	1.00	11.99
ATOM	12438	CG1	VAL	1862	16.238	-18.982	26.367	1.00	13.48
ATOM	12439	CG2	VAL	1862	17.715	-18.775	24.349	1.00	13.06
ATOM	12440	C	VAL	1862	13.864	-19.080	24.695	1.00	11.31
ATOM	12441	O	VAL	1862	13.366	-19.955	25.398	1.00	11.62
ATOM	12442	N	ALA	1863	13.227	-17.941	24.421	1.00	10.93
ATOM	12443	CA	ALA	1863	11.893	-17.697	24.966	1.00	10.99
ATOM	12444	CB	ALA	1863	11.380	-16.336	24.535	1.00	13.54
ATOM	12445	C	ALA	1863	10.925	-18.773	24.499	1.00	10.75
ATOM	12446	O	ALA	1863	10.087	-19.240	25.278	1.00	8.92
ATOM	12447	N	ASP	1864	11.013	-19.141	23.221	1.00	8.92
ATOM	12448	CA	ASP	1864	10.135	-20.191	22.669	1.00	9.84
ATOM	12449	CB	ASP	1864	10.452	-20.488	21.191	1.00	9.14
ATOM	12450	CG	ASP	1864	10.169	-19.322	20.263	1.00	9.13
ATOM	12451	OD1	ASP	1864	9.190	-18.581	20.490	1.00	11.77
ATOM	12452	OD2	ASP	1864	10.918	-19.167	19.272	1.00	10.86
ATOM	12453	C	ASP	1864	10.328	-21.487	23.456	1.00	9.58
ATOM	12454	O	ASP	1864	9.358	-22.134	23.861	1.00	8.41
ATOM	12455	N	ILE	1865	11.583	-21.876	23.660	1.00	8.67
ATOM	12456	CA	ILE	1865	11.879	-23.111	24.398	1.00	9.31
ATOM	12457	CB	ILE	1865	13.409	-23.355	24.520	1.00	9.33
ATOM	12458	CG2	ILE	1865	13.668	-24.518	25.470	1.00	11.52
ATOM	12459	CG1	ILE	1865	14.035	-23.606	23.134	1.00	9.79
ATOM	12460	CD1	ILE	1865	13.509	-24.855	22.397	1.00	8.07
ATOM	12461	C	ILE	1865	11.285	-23.036	25.808	1.00	9.25
ATOM	12462	O	ILE	1865	10.661	-23.991	26.283	1.00	9.30
ATOM	12463	N	ALA	1866	11.492	-21.906	26.483	1.00	7.42
ATOM	12464	CA	ALA	1866	10.969	-21.716	27.843	1.00	5.92
ATOM	12465	CB	ALA	1866	11.352	-20.335	28.373	1.00	6.24
ATOM	12466	C	ALA	1866	9.452	-21.879	27.895	1.00	8.68
ATOM	12467	O	ALA	1866	8.904	-22.480	28.826	1.00	6.71
ATOM	12468	N	TYR	1867	8.768	-21.319	26.903	1.00	7.88
ATOM	12469	CA	TYR	1867	7.307	-21.421	26.817	1.00	9.45
ATOM	12470	CB	TYR	1867	6.799	-20.700	25.550	1.00	8.36
ATOM	12471	CG	TYR	1867	5.304	-20.839	25.314	1.00	8.40
ATOM	12472	CD1	TYR	1867	4.384	-20.257	26.184	1.00	11.09
ATOM	12473	CE1	TYR	1867	3.010	-20.316	25.930	1.00	11.97
ATOM	12474	CD2	TYR	1867	4.812	-21.496	24.187	1.00	9.92
ATOM	12475	CE2	TYR	1867	3.440	-21.561	23.925	1.00	9.81
ATOM	12476	CZ	TYR	1867	2.550	-20.968	24.791	1.00	9.83
ATOM	12477	OH	TYR	1867	1.204	-20.972	24.502	1.00	13.41
ATOM	12478	C	TYR	1867	6.844	-22.874	26.773	1.00	9.90
ATOM	12479	O	TYR	1867	5.984	-23.308	27.556	1.00	8.93
ATOM	12480	N	HIS	1868	7.413	-23.629	25.843	1.00	7.87
ATOM	12481	CA	HIS	1868	7.025	-25.026	25.691	1.00	10.27
ATOM	12482	CB	HIS	1868	7.557	-25.543	24.349	1.00	9.57
ATOM	12483	CG	HIS	1868	6.843	-24.939	23.174	1.00	9.11
ATOM	12484	CD2	HIS	1868	7.194	-23.938	22.330	1.00	9.03
ATOM	12485	ND1	HIS	1868	5.543	-25.267	22.852	1.00	8.93
ATOM	12486	CE1	HIS	1868	5.120	-24.490	21.870	1.00	8.96
ATOM	12487	NE2	HIS	1868	6.102	-23.674	21.534	1.00	8.75
ATOM	12488	C	HIS	1868	7.483	-25.860	26.874	1.00	10.42
ATOM	12489	O	HIS	1868	6.800	-26.804	27.266	1.00	9.01
ATOM	12490	N	THR	1869	8.611	-25.481	27.469	1.00	10.19
ATOM	12491	CA	THR	1869	9.133	-26.197	28.635	1.00	10.01
ATOM	12492	CB	THR	1869	10.520	-25.639	29.032	1.00	11.08
ATOM	12493	OG1	THR	1869	11.474	-25.995	28.022	1.00	11.79
ATOM	12494	CG2	THR	1869	10.984	-26.205	30.378	1.00	10.61
ATOM	12495	C	THR	1869	8.156	-26.077	29.809	1.00	10.50
ATOM	12496	O	THR	1869	7.896	-27.056	30.501	1.00	9.02
ATOM	12497	N	ALA	1870	7.607	-24.884	30.036	1.00	9.46
ATOM	12498	CA	ALA	1870	6.673	-24.719	31.146	1.00	10.75
ATOM	12499	CB	ALA	1870	6.301	-23.242	31.331	1.00	11.04
ATOM	12500	C	ALA	1870	5.416	-25.553	30.909	1.00	10.58
ATOM	12501	O	ALA	1870	4.886	-26.180	31.831	1.00	11.31
ATOM	12502	N	ALA	1871	4.939	-25.568	29.672	1.00	9.74

ATOM	12503	CA	ALA	1871	3.738	-26.332	29.347	1.00	10.34
ATOM	12504	CB	ALA	1871	3.323	-26.056	27.907	1.00	9.64
ATOM	12505	C	ALA	1871	3.965	-27.828	29.559	1.00	10.87
ATOM	12506	O	ALA	1871	3.104	-28.514	30.116	1.00	11.14
ATOM	12507	N	VAL	1872	5.119	-28.333	29.126	1.00	8.50
ATOM	12508	CA	VAL	1872	5.418	-29.754	29.300	1.00	9.80
ATOM	12509	CB	VAL	1872	6.724	-30.161	28.569	1.00	8.60
ATOM	12510	CG1	VAL	1872	7.169	-31.563	29.019	1.00	5.70
ATOM	12511	CG2	VAL	1872	6.483	-30.174	27.061	1.00	8.96
ATOM	12512	C	VAL	1872	5.518	-30.078	30.788	1.00	10.76
ATOM	12513	O	VAL	1872	4.979	-31.085	31.245	1.00	11.38
ATOM	12514	N	ARG	1873	6.192	-29.221	31.549	1.00	10.87
ATOM	12515	CA	ARG	1873	6.311	-29.450	32.980	1.00	9.93
ATOM	12516	CB	ARG	1873	7.153	-28.348	33.647	1.00	7.52
ATOM	12517	CG	ARG	1873	7.288	-28.505	35.177	1.00	10.26
ATOM	12518	CD	ARG	1873	7.857	-29.878	35.567	1.00	12.74
ATOM	12519	NE	ARG	1873	9.289	-30.011	35.288	1.00	15.69
ATOM	12520	CZ	ARG	1873	9.939	-31.172	35.250	1.00	12.78
ATOM	12521	NH1	ARG	1873	9.290	-32.304	35.461	1.00	13.43
ATOM	12522	NH2	ARG	1873	11.242	-31.205	35.025	1.00	12.86
ATOM	12523	C	ARG	1873	4.924	-29.522	33.645	1.00	10.69
ATOM	12524	O	ARG	1873	4.726	-30.310	34.562	1.00	12.04
ATOM	12525	N	ARG	1874	3.968	-28.713	33.190	1.00	9.73
ATOM	12526	CA	ARG	1874	2.631	-28.750	33.774	1.00	10.96
ATOM	12527	CB	ARG	1874	1.736	-27.640	33.206	1.00	12.21
ATOM	12528	CG	ARG	1874	2.285	-26.245	33.444	1.00	15.36
ATOM	12529	CD	ARG	1874	1.230	-25.139	33.364	1.00	17.99
ATOM	12530	NE	ARG	1874	1.868	-23.843	33.592	1.00	15.73
ATOM	12531	CZ	ARG	1874	2.419	-23.101	32.637	1.00	19.11
ATOM	12532	NH1	ARG	1874	2.397	-23.517	31.373	1.00	14.81
ATOM	12533	NH2	ARG	1874	3.027	-21.961	32.955	1.00	17.47
ATOM	12534	C	ARG	1874	1.970	-30.110	33.546	1.00	11.41
ATOM	12535	O	ARG	1874	1.273	-30.630	34.424	1.00	14.88
ATOM	12536	N	GLY	1875	2.200	-30.696	32.380	1.00	11.22
ATOM	12537	CA	GLY	1875	1.606	-31.990	32.077	1.00	10.19
ATOM	12538	C	GLY	1875	2.323	-33.162	32.720	1.00	10.02
ATOM	12539	O	GLY	1875	1.708	-34.182	33.021	1.00	9.60
ATOM	12540	N	ALA	1876	3.627	-33.012	32.935	1.00	11.21
ATOM	12541	CA	ALA	1876	4.455	-34.071	33.527	1.00	11.50
ATOM	12542	CB	ALA	1876	5.309	-34.718	32.430	1.00	14.27
ATOM	12543	C	ALA	1876	5.350	-33.513	34.633	1.00	12.82
ATOM	12544	O	ALA	1876	6.560	-33.374	34.453	1.00	11.92
ATOM	12545	N	PRO	1877	4.771	-33.210	35.806	1.00	14.04
ATOM	12546	CD	PRO	1877	3.375	-33.476	36.216	1.00	14.97
ATOM	12547	CA	PRO	1877	5.554	-32.657	36.920	1.00	15.62
ATOM	12548	CB	PRO	1877	4.491	-32.375	37.984	1.00	15.70
ATOM	12549	CG	PRO	1877	3.469	-33.421	37.736	1.00	18.20
ATOM	12550	C	PRO	1877	6.699	-33.510	37.462	1.00	16.14
ATOM	12551	O	PRO	1877	7.589	-32.992	38.132	1.00	18.76
ATOM	12552	N	ASN	1878	6.686	-34.801	37.146	1.00	15.89
ATOM	12553	CA	ASN	1878	7.709	-35.718	37.638	1.00	17.91
ATOM	12554	CB	ASN	1878	7.038	-36.936	38.288	1.00	22.40
ATOM	12555	CG	ASN	1878	6.081	-36.552	39.400	1.00	25.24
ATOM	12556	OD1	ASN	1878	6.463	-35.889	40.359	1.00	29.66
ATOM	12557	ND2	ASN	1878	4.824	-36.974	39.275	1.00	28.39
ATOM	12558	C	ASN	1878	8.710	-36.209	36.595	1.00	17.02
ATOM	12559	O	ASN	1878	9.604	-36.986	36.919	1.00	16.69
ATOM	12560	N	CYS	1879	8.578	-35.763	35.349	1.00	15.26
ATOM	12561	CA	CYS	1879	9.487	-36.238	34.309	1.00	13.68
ATOM	12562	CB	CYS	1879	8.890	-35.991	32.917	1.00	14.20
ATOM	12563	SG	CYS	1879	9.037	-34.260	32.286	1.00	16.39
ATOM	12564	C	CYS	1879	10.865	-35.596	34.365	1.00	13.72
ATOM	12565	O	CYS	1879	11.085	-34.604	35.062	1.00	13.75
ATOM	12566	N	LEU	1880	11.802	-36.213	33.658	1.00	13.56
ATOM	12567	CA	LEU	1880	13.130	-35.660	33.540	1.00	13.22
ATOM	12568	CB	LEU	1880	14.185	-36.740	33.317	1.00	12.70
ATOM	12569	CG	LEU	1880	15.583	-36.162	33.044	1.00	12.13
ATOM	12570	CD1	LEU	1880	16.056	-35.315	34.242	1.00	14.50
ATOM	12571	CD2	LEU	1880	16.561	-37.299	32.782	1.00	15.41
ATOM	12572	C	LEU	1880	12.925	-34.860	32.259	1.00	11.47
ATOM	12573	O	LEU	1880	12.573	-35.430	31.231	1.00	12.83
ATOM	12574	N	LEU	1881	13.124	-33.546	32.324	1.00	8.79
ATOM	12575	CA	LEU	1881	12.881	-32.705	31.166	1.00	10.82
ATOM	12576	CB	LEU	1881	11.882	-31.600	31.534	1.00	11.46
ATOM	12577	CG	LEU	1881	11.152	-30.776	30.459	1.00	14.79
ATOM	12578	CD1	LEU	1881	10.169	-29.889	31.176	1.00	14.22
ATOM	12579	CD2	LEU	1881	12.096	-29.933	29.599	1.00	17.18

ATOM	12580	C	LEU	1881	14.140	-32.077	30.601	1.00	11.03
ATOM	12581	O	LEU	1881	14.802	-31.293	31.271	1.00	13.13
ATOM	12582	N	LEU	1882	14.460	-32.434	29.362	1.00	10.50
ATOM	12583	CA	LEU	1882	15.622	-31.885	28.698	1.00	11.79
ATOM	12584	CB	LEU	1882	16.333	-32.952	27.868	1.00	11.43
ATOM	12585	CG	LEU	1882	17.203	-33.973	28.607	1.00	15.97
ATOM	12586	CD1	LEU	1882	16.363	-34.799	29.575	1.00	17.09
ATOM	12587	CD2	LEU	1882	17.882	-34.878	27.577	1.00	16.23
ATOM	12588	C	LEU	1882	15.146	-30.767	27.787	1.00	13.92
ATOM	12589	O	LEU	1882	14.172	-30.926	27.051	1.00	17.46
ATOM	12590	N	ALA	1883	15.808	-29.623	27.852	1.00	11.32
ATOM	12591	CA	ALA	1883	15.426	-28.520	26.990	1.00	12.45
ATOM	12592	CB	ALA	1883	14.960	-27.342	27.824	1.00	12.10
ATOM	12593	C	ALA	1883	16.624	-28.132	26.144	1.00	11.52
ATOM	12594	O	ALA	1883	17.748	-28.030	26.639	1.00	10.54
ATOM	12595	N	ASP	1884	16.384	-27.941	24.853	1.00	12.57
ATOM	12596	CA	ASP	1884	17.447	-27.533	23.935	1.00	12.76
ATOM	12597	CB	ASP	1884	16.981	-27.649	22.477	1.00	13.52
ATOM	12598	CG	ASP	1884	17.351	-28.961	21.828	1.00	15.04
ATOM	12599	OD1	ASP	1884	17.887	-29.851	22.513	1.00	16.51
ATOM	12600	OD2	ASP	1884	17.098	-29.083	20.610	1.00	14.48
ATOM	12601	C	ASP	1884	17.785	-26.069	24.139	1.00	14.66
ATOM	12602	O	ASP	1884	16.934	-25.277	24.550	1.00	13.13
ATOM	12603	N	LEU	1885	19.040	-25.719	23.880	1.00	12.80
ATOM	12604	CA	LEU	1885	19.449	-24.318	23.862	1.00	12.01
ATOM	12605	CB	LEU	1885	20.860	-24.097	24.411	1.00	11.51
ATOM	12606	CG	LEU	1885	20.951	-24.044	25.932	1.00	13.75
ATOM	12607	CD1	LEU	1885	22.335	-23.553	26.373	1.00	14.19
ATOM	12608	CD2	LEU	1885	19.862	-23.123	26.460	1.00	15.95
ATOM	12609	C	LEU	1885	19.472	-24.182	22.340	1.00	10.80
ATOM	12610	O	LEU	1885	20.170	-24.932	21.653	1.00	11.71
ATOM	12611	N	PRO	1886	18.696	-23.245	21.793	1.00	10.45
ATOM	12612	CD	PRO	1886	17.852	-22.290	22.538	1.00	10.25
ATOM	12613	CA	PRO	1886	18.606	-23.014	20.350	1.00	11.23
ATOM	12614	CB	PRO	1886	17.356	-22.158	20.234	1.00	11.55
ATOM	12615	CG	PRO	1886	17.457	-21.296	21.474	1.00	11.59
ATOM	12616	C	PRO	1886	19.819	-22.372	19.670	1.00	11.51
ATOM	12617	O	PRO	1886	20.825	-22.065	20.314	1.00	13.04
ATOM	12618	N	PHE	1887	19.692	-22.178	18.358	1.00	9.35
ATOM	12619	CA	PHE	1887	20.723	-21.578	17.516	1.00	10.68
ATOM	12620	CB	PHE	1887	20.125	-21.260	16.136	1.00	11.05
ATOM	12621	CG	PHE	1887	20.992	-20.370	15.277	1.00	12.47
ATOM	12622	CD1	PHE	1887	22.251	-20.793	14.856	1.00	15.73
ATOM	12623	CD2	PHE	1887	20.546	-19.110	14.890	1.00	14.62
ATOM	12624	CE1	PHE	1887	23.058	-19.975	14.057	1.00	15.72
ATOM	12625	CE2	PHE	1887	21.340	-18.276	14.092	1.00	13.51
ATOM	12626	CZ	PHE	1887	22.598	-18.717	13.679	1.00	15.84
ATOM	12627	C	PHE	1887	21.290	-20.311	18.153	1.00	10.86
ATOM	12628	O	PHE	1887	20.547	-19.417	18.545	1.00	9.48
ATOM	12629	N	MET	1888	22.614	-20.260	18.250	1.00	8.23
ATOM	12630	CA	MET	1888	23.337	-19.130	18.827	1.00	10.91
ATOM	12631	CB	MET	1888	23.230	-17.906	17.906	1.00	13.53
ATOM	12632	CG	MET	1888	24.386	-16.914	18.080	1.00	15.10
ATOM	12633	SD	MET	1888	26.011	-17.588	17.599	1.00	16.09
ATOM	12634	CE	MET	1888	26.079	-17.055	15.901	1.00	19.82
ATOM	12635	C	MET	1888	22.920	-18.736	20.251	1.00	12.89
ATOM	12636	O	MET	1888	23.012	-17.564	20.629	1.00	13.39
ATOM	12637	N	ALA	1889	22.468	-19.707	21.040	1.00	10.65
ATOM	12638	CA	ALA	1889	22.079	-19.421	22.413	1.00	11.53
ATOM	12639	CB	ALA	1889	20.803	-20.186	22.791	1.00	12.05
ATOM	12640	C	ALA	1889	23.200	-19.776	23.383	1.00	11.33
ATOM	12641	O	ALA	1889	23.067	-19.595	24.595	1.00	13.56
ATOM	12642	N	TYR	1890	24.305	-20.292	22.859	1.00	11.07
ATOM	12643	CA	TYR	1890	25.439	-20.634	23.707	1.00	12.50
ATOM	12644	CB	TYR	1890	25.378	-22.121	24.089	1.00	12.92
ATOM	12645	CG	TYR	1890	25.067	-23.060	22.939	1.00	13.64
ATOM	12646	CD1	TYR	1890	26.089	-23.716	22.253	1.00	14.95
ATOM	12647	CE1	TYR	1890	25.809	-24.579	21.191	1.00	15.46
ATOM	12648	CD2	TYR	1890	23.750	-23.288	22.535	1.00	14.15
ATOM	12649	CE2	TYR	1890	23.456	-24.150	21.471	1.00	15.84
ATOM	12650	CZ	TYR	1890	24.488	-24.788	20.809	1.00	16.93
ATOM	12651	OH	TYR	1890	24.206	-25.631	19.756	1.00	19.58
ATOM	12652	C	TYR	1890	26.743	-20.287	23.000	1.00	12.88
ATOM	12653	O	TYR	1890	27.716	-21.043	23.037	1.00	13.54
ATOM	12654	N	ALA	1891	26.741	-19.114	22.371	1.00	11.98
ATOM	12655	CA	ALA	1891	27.885	-18.600	21.618	1.00	13.29
ATOM	12656	CB	ALA	1891	27.472	-17.339	20.862	1.00	13.53

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ATOM   12657  C    ALA   1891      29.100 -18.305  22.490  1.00 13.87
ATOM   12658  O    ALA   1891      30.231 -18.288  22.009  1.00 13.32
ATOM   12659  N    THR   1892      28.850 -18.059  23.769  1.00 12.24
ATOM   12660  CA   THR   1892      29.905 -17.796  24.737  1.00 12.51
ATOM   12661  CB   THR   1892      30.098 -16.286  25.011  1.00 11.96
ATOM   12662  OG1  THR   1892      28.968 -15.783  25.737  1.00 12.50
ATOM   12663  CG2  THR   1892      30.235 -15.516  23.709  1.00 13.36
ATOM   12664  C    THR   1892      29.448 -18.432  26.033  1.00 13.46
ATOM   12665  O    THR   1892      28.252 -18.666  26.231  1.00 14.08
ATOM   12666  N    PRO   1893      30.393 -18.732  26.932  1.00 14.40
ATOM   12667  CD   PRO   1893      31.860 -18.731  26.789  1.00 13.32
ATOM   12668  CA   PRO   1893      29.988 -19.339  28.196  1.00 14.16
ATOM   12669  CB   PRO   1893      31.316 -19.513  28.929  1.00 17.60
ATOM   12670  CG   PRO   1893      32.274 -19.784  27.800  1.00 15.21
ATOM   12671  C    PRO   1893      28.992 -18.442  28.936  1.00 13.95
ATOM   12672  O    PRO   1893      27.964 -18.910  29.425  1.00 11.45
ATOM   12673  N    GLU   1894      29.273 -17.144  28.994  1.00 15.13
ATOM   12674  CA   GLU   1894      28.374 -16.224  29.681  1.00 15.41
ATOM   12675  CB   GLU   1894      28.946 -14.803  29.634  1.00 19.41
ATOM   12676  CG   GLU   1894      28.154 -13.789  30.437  1.00 28.99
ATOM   12677  CD   GLU   1894      29.047 -12.721  31.046  1.00 32.24
ATOM   12678  OE1  GLU   1894      29.945 -12.223  30.334  1.00 34.50
ATOM   12679  OE2  GLU   1894      28.849 -12.379  32.233  1.00 37.07
ATOM   12680  C    GLU   1894      26.951 -16.261  29.111  1.00 14.63
ATOM   12681  O    GLU   1894      25.981 -16.257  29.869  1.00 14.06
ATOM   12682  N    GLN   1895      26.811 -16.307  27.787  1.00 13.27
ATOM   12683  CA   GLN   1895      25.473 -16.360  27.184  1.00 14.64
ATOM   12684  CB   GLN   1895      25.539 -16.123  25.675  1.00 18.45
ATOM   12685  CG   GLN   1895      26.046 -14.746  25.293  1.00 26.37
ATOM   12686  CD   GLN   1895      25.806 -14.442  23.835  1.00 30.60
ATOM   12687  OE1  GLN   1895      24.660 -14.396  23.389  1.00 35.03
ATOM   12688  NE2  GLN   1895      26.883 -14.236  23.077  1.00 35.29
ATOM   12689  C    GLN   1895      24.810 -17.704  27.445  1.00 14.04
ATOM   12690  O    GLN   1895      23.587 -17.791  27.603  1.00 12.48
ATOM   12691  N    ALA   1896      25.616 -18.758  27.465  1.00 11.38
ATOM   12692  CA   ALA   1896      25.085 -20.086  27.732  1.00 11.76
ATOM   12693  CB   ALA   1896      26.188 -21.149  27.572  1.00 11.03
ATOM   12694  C    ALA   1896      24.510 -20.130  29.153  1.00 11.59
ATOM   12695  O    ALA   1896      23.460 -20.733  29.387  1.00 11.46
ATOM   12696  N    PHE   1897      25.191 -19.475  30.094  1.00 10.77
ATOM   12697  CA   PHE   1897      24.738 -19.446  31.485  1.00 11.53
ATOM   12698  CB   PHE   1897      25.690 -18.639  32.390  1.00  9.99
ATOM   12699  CG   PHE   1897      27.119 -19.116  32.392  1.00 10.28
ATOM   12700  CD1  PHE   1897      27.439 -20.445  32.150  1.00 12.24
ATOM   12701  CD2  PHE   1897      28.153 -18.211  32.657  1.00  9.95
ATOM   12702  CE1  PHE   1897      28.775 -20.879  32.166  1.00 12.67
ATOM   12703  CE2  PHE   1897      29.489 -18.623  32.677  1.00 11.90
ATOM   12704  CZ   PHE   1897      29.799 -19.959  32.429  1.00 13.96
ATOM   12705  C    PHE   1897      23.364 -18.814  31.627  1.00 11.72
ATOM   12706  O    PHE   1897      22.498 -19.343  32.322  1.00 10.76
ATOM   12707  N    GLU   1898      23.183 -17.667  30.986  1.00 11.55
ATOM   12708  CA   GLU   1898      21.924 -16.945  31.060  1.00 14.41
ATOM   12709  CB   GLU   1898      22.072 -15.550  30.444  1.00 17.46
ATOM   12710  CG   GLU   1898      20.906 -14.623  30.790  1.00 25.46
ATOM   12711  CD   GLU   1898      20.594 -14.618  32.284  1.00 28.92
ATOM   12712  OE1  GLU   1898      21.449 -14.157  33.072  1.00 31.30
ATOM   12713  OE2  GLU   1898      19.495 -15.105  32.675  1.00 34.77
ATOM   12714  C    GLU   1898      20.793 -17.692  30.382  1.00 12.46
ATOM   12715  O    GLU   1898      19.701 -17.792  30.933  1.00 11.48
ATOM   12716  N    ASN   1899      21.045 -18.229  29.192  1.00 12.32
ATOM   12717  CA   ASN   1899      19.988 -18.947  28.489  1.00 11.52
ATOM   12718  CB   ASN   1899      20.318 -19.064  26.999  1.00 12.87
ATOM   12719  CG   ASN   1899      20.455 -17.700  26.329  1.00 14.75
ATOM   12720  OD1  ASN   1899      19.690 -16.777  26.621  1.00 10.94
ATOM   12721  ND2  ASN   1899      21.405 -17.579  25.411  1.00 11.61
ATOM   12722  C    ASN   1899      19.686 -20.311  29.096  1.00 11.22
ATOM   12723  O    ASN   1899      18.534 -20.758  29.053  1.00 10.29
ATOM   12724  N    ALA   1900      20.690 -20.985  29.658  1.00 10.29
ATOM   12725  CA   ALA   1900      20.430 -22.271  30.307  1.00  9.38
ATOM   12726  CB   ALA   1900      21.746 -22.926  30.770  1.00  8.73
ATOM   12727  C    ALA   1900      19.543 -21.970  31.522  1.00  9.37
ATOM   12728  O    ALA   1900      18.551 -22.646  31.762  1.00  8.92
ATOM   12729  N    ALA   1901      19.908 -20.936  32.275  1.00 10.46
ATOM   12730  CA   ALA   1901      19.147 -20.551  33.458  1.00  9.71
ATOM   12731  CB   ALA   1901      19.748 -19.294  34.086  1.00  9.98
ATOM   12732  C    ALA   1901      17.686 -20.305  33.109  1.00  9.18
ATOM   12733  O    ALA   1901      16.783 -20.733  33.823  1.00  9.21
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ATOM  12734  N    THR  1902     17.456 -19.601  32.007  1.00  9.93
ATOM  12735  CA   THR  1902     16.092 -19.293  31.588  1.00 10.15
ATOM  12736  CB   THR  1902     16.081 -18.483  30.279  1.00 10.21
ATOM  12737  OG1  THR  1902     16.814 -17.268  30.484  1.00 10.06
ATOM  12738  CG2  THR  1902     14.647 -18.122  29.878  1.00  9.60
ATOM  12739  C    THR  1902     15.264 -20.549  31.403  1.00 10.35
ATOM  12740  O    THR  1902     14.156 -20.659  31.941  1.00  8.19
ATOM  12741  N    VAL  1903     15.801 -21.506  30.655  1.00 10.07
ATOM  12742  CA   VAL  1903     15.052 -22.723  30.410  1.00 12.02
ATOM  12743  CB   VAL  1903     15.620 -23.470  29.168  1.00 13.59
ATOM  12744  CG1  VAL  1903     16.916 -24.192  29.494  1.00 12.92
ATOM  12745  CG2  VAL  1903     14.577 -24.403  28.622  1.00 21.31
ATOM  12746  C    VAL  1903     14.936 -23.627  31.648  1.00 10.38
ATOM  12747  O    VAL  1903     13.961 -24.369  31.787  1.00  9.04
ATOM  12748  N    MET  1904     15.901 -23.545  32.558  1.00 10.20
ATOM  12749  CA   MET  1904     15.842 -24.351  33.778  1.00 11.10
ATOM  12750  CB   MET  1904     17.223 -24.428  34.444  1.00 12.49
ATOM  12751  CG   MET  1904     18.307 -25.051  33.599  1.00 18.01
ATOM  12752  SD   MET  1904     18.226 -26.845  33.611  1.00 19.52
ATOM  12753  CE   MET  1904     18.566 -27.204  35.406  1.00 18.10
ATOM  12754  C    MET  1904     14.826 -23.742  34.761  1.00  9.98
ATOM  12755  O    MET  1904     14.108 -24.479  35.433  1.00 11.43
ATOM  12756  N    ARG  1905     14.770 -22.412  34.860  1.00  8.90
ATOM  12757  CA   ARG  1905     13.799 -21.809  35.775  1.00  8.03
ATOM  12758  CB   ARG  1905     13.982 -20.295  35.901  1.00  8.24
ATOM  12759  CG   ARG  1905     15.331 -19.885  36.473  1.00 12.25
ATOM  12760  CD   ARG  1905     15.304 -18.465  37.003  1.00 11.94
ATOM  12761  NE   ARG  1905     16.652 -17.990  37.289  1.00 15.25
ATOM  12762  CZ   ARG  1905     17.447 -17.418  36.393  1.00 13.90
ATOM  12763  NH1  ARG  1905     17.029 -17.233  35.149  1.00 14.60
ATOM  12764  NH2  ARG  1905     18.677 -17.063  36.733  1.00 17.42
ATOM  12765  C    ARG  1905     12.398 -22.099  35.256  1.00  9.53
ATOM  12766  O    ARG  1905     11.445 -22.195  36.024  1.00 10.47
ATOM  12767  N    ALA  1906     12.291 -22.274  33.946  1.00  8.58
ATOM  12768  CA   ALA  1906     11.011 -22.538  33.317  1.00  8.67
ATOM  12769  CB   ALA  1906     11.100 -22.235  31.814  1.00  9.41
ATOM  12770  C    ALA  1906     10.511 -23.963  33.535  1.00 10.77
ATOM  12771  O    ALA  1906      9.351 -24.270  33.250  1.00 10.28
ATOM  12772  N    GLY  1907     11.382 -24.841  34.018  1.00 10.02
ATOM  12773  CA   GLY  1907     10.962 -26.209  34.291  1.00  9.93
ATOM  12774  C    GLY  1907     11.889 -27.330  33.869  1.00 12.15
ATOM  12775  O    GLY  1907     11.684 -28.485  34.261  1.00 11.23
ATOM  12776  N    ALA  1908     12.907 -27.009  33.081  1.00 11.34
ATOM  12777  CA   ALA  1908     13.851 -28.026  32.612  1.00 11.08
ATOM  12778  CB   ALA  1908     14.702 -27.455  31.475  1.00 10.75
ATOM  12779  C    ALA  1908     14.758 -28.529  33.739  1.00 11.38
ATOM  12780  O    ALA  1908     14.955 -27.848  34.747  1.00  8.45
ATOM  12781  N    ASN  1909     15.303 -29.729  33.567  1.00 11.47
ATOM  12782  CA   ASN  1909     16.205 -30.302  34.564  1.00 10.53
ATOM  12783  CB   ASN  1909     15.804 -31.727  34.939  1.00 12.92
ATOM  12784  CG   ASN  1909     14.432 -31.812  35.556  1.00 14.93
ATOM  12785  OD1  ASN  1909     14.140 -31.192  36.589  1.00 14.28
ATOM  12786  ND2  ASN  1909     13.577 -32.595  34.928  1.00 10.46
ATOM  12787  C    ASN  1909     17.593 -30.385  33.970  1.00 11.82
ATOM  12788  O    ASN  1909     18.569 -30.560  34.682  1.00 12.44
ATOM  12789  N    MET  1910     17.670 -30.262  32.653  1.00 10.66
ATOM  12790  CA   MET  1910     18.934 -30.391  31.960  1.00 11.23
ATOM  12791  CB   MET  1910     19.228 -31.888  31.799  1.00 11.33
ATOM  12792  CG   MET  1910     20.340 -32.264  30.850  1.00 15.81
ATOM  12793  SD   MET  1910     20.549 -34.076  30.827  1.00 17.80
ATOM  12794  CE   MET  1910     21.887 -34.311  32.027  1.00 18.58
ATOM  12795  C    MET  1910     18.822 -29.716  30.601  1.00 10.32
ATOM  12796  O    MET  1910     17.730 -29.632  30.036  1.00 10.64
ATOM  12797  N    VAL  1911     19.941 -29.223  30.086  1.00  9.77
ATOM  12798  CA   VAL  1911     19.942 -28.561  28.791  1.00 10.49
ATOM  12799  CB   VAL  1911     20.552 -27.149  28.904  1.00 14.32
ATOM  12800  CG1  VAL  1911     20.525 -26.477  27.563  1.00 20.77
ATOM  12801  CG2  VAL  1911     19.784 -26.322  29.924  1.00 16.29
ATOM  12802  C    VAL  1911     20.752 -29.368  27.782  1.00 11.18
ATOM  12803  O    VAL  1911     21.758 -29.989  28.128  1.00 12.97
ATOM  12804  N    LYS  1912     20.304 -29.364  26.535  1.00 11.26
ATOM  12805  CA   LYS  1912     21.019 -30.062  25.480  1.00 11.63
ATOM  12806  CB   LYS  1912     20.088 -30.999  24.712  1.00 11.49
ATOM  12807  CG   LYS  1912     20.806 -31.774  23.598  1.00 13.76
ATOM  12808  CD   LYS  1912     20.027 -33.015  23.160  1.00 15.10
ATOM  12809  CE   LYS  1912     18.742 -32.667  22.415  1.00 17.50
ATOM  12810  NZ   LYS  1912     18.980 -32.003  21.096  1.00 16.50
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ATOM	12811	C	LYS	1912	21.607	-29.027	24.522	1.00	10.56
ATOM	12812	O	LYS	1912	20.928	-28.077	24.128	1.00	12.27
ATOM	12813	N	ILE	1913	22.875	-29.208	24.169	1.00	11.16
ATOM	12814	CA	ILE	1913	23.566	-28.301	23.260	1.00	14.22
ATOM	12815	CB	ILE	1913	24.541	-27.375	24.034	1.00	16.27
ATOM	12816	CG2	ILE	1913	23.738	-26.374	24.883	1.00	15.84
ATOM	12817	CG1	ILE	1913	25.463	-28.206	24.925	1.00	18.46
ATOM	12818	CD1	ILE	1913	26.415	-27.376	25.786	1.00	18.67
ATOM	12819	C	ILE	1913	24.335	-29.121	22.228	1.00	15.17
ATOM	12820	O	ILE	1913	24.929	-30.149	22.563	1.00	15.09
ATOM	12821	N	GLU	1914	24.326	-28.671	20.975	1.00	15.40
ATOM	12822	CA	GLU	1914	25.003	-29.392	19.889	1.00	16.44
ATOM	12823	CB	GLU	1914	24.205	-29.272	18.582	1.00	19.74
ATOM	12824	CG	GLU	1914	22.709	-29.426	18.725	1.00	25.29
ATOM	12825	CD	GLU	1914	21.987	-29.391	17.387	1.00	28.05
ATOM	12826	OE1	GLU	1914	22.415	-28.626	16.497	1.00	28.95
ATOM	12827	OE2	GLU	1914	20.987	-30.120	17.231	1.00	31.69
ATOM	12828	C	GLU	1914	26.411	-28.893	19.623	1.00	15.88
ATOM	12829	O	GLU	1914	26.630	-27.696	19.463	1.00	14.70
ATOM	12830	N	GLY	1915	27.371	-29.805	19.550	1.00	16.86
ATOM	12831	CA	GLY	1915	28.736	-29.379	19.288	1.00	18.17
ATOM	12832	C	GLY	1915	29.783	-30.355	19.788	1.00	20.08
ATOM	12833	O	GLY	1915	29.497	-31.203	20.631	1.00	21.39
ATOM	12834	N	GLY	1916	30.999	-30.223	19.264	1.00	20.87
ATOM	12835	CA	GLY	1916	32.086	-31.091	19.662	1.00	22.00
ATOM	12836	C	GLY	1916	32.949	-30.518	20.768	1.00	22.33
ATOM	12837	O	GLY	1916	32.449	-29.886	21.705	1.00	21.23
ATOM	12838	N	GLU	1917	34.258	-30.720	20.656	1.00	22.96
ATOM	12839	CA	GLU	1917	35.178	-30.232	21.677	1.00	22.46
ATOM	12840	CB	GLU	1917	36.608	-30.681	21.376	1.00	26.72
ATOM	12841	CG	GLU	1917	36.939	-32.014	22.003	1.00	33.75
ATOM	12842	CD	GLU	1917	38.367	-32.087	22.494	1.00	34.57
ATOM	12843	OE1	GLU	1917	38.778	-31.190	23.257	1.00	37.45
ATOM	12844	OE2	GLU	1917	39.067	-33.048	22.120	1.00	39.06
ATOM	12845	C	GLU	1917	35.189	-28.738	21.944	1.00	19.95
ATOM	12846	O	GLU	1917	35.604	-28.324	23.018	1.00	18.13
ATOM	12847	N	TRP	1918	34.747	-27.920	20.994	1.00	18.83
ATOM	12848	CA	TRP	1918	34.771	-26.492	21.255	1.00	16.44
ATOM	12849	CB	TRP	1918	34.372	-25.680	20.010	1.00	16.23
ATOM	12850	CG	TRP	1918	32.918	-25.705	19.630	1.00	15.75
ATOM	12851	CD2	TRP	1918	31.940	-24.702	19.927	1.00	15.59
ATOM	12852	CE2	TRP	1918	30.728	-25.106	19.323	1.00	16.90
ATOM	12853	CE3	TRP	1918	31.970	-23.499	20.646	1.00	17.10
ATOM	12854	CD1	TRP	1918	32.275	-26.655	18.882	1.00	18.69
ATOM	12855	NE1	TRP	1918	30.960	-26.300	18.691	1.00	17.49
ATOM	12856	CZ2	TRP	1918	29.554	-24.345	19.412	1.00	14.08
ATOM	12857	CZ3	TRP	1918	30.802	-22.739	20.738	1.00	17.47
ATOM	12858	CH2	TRP	1918	29.607	-23.170	20.121	1.00	17.12
ATOM	12859	C	TRP	1918	33.878	-26.130	22.439	1.00	15.03
ATOM	12860	O	TRP	1918	34.044	-25.078	23.051	1.00	15.31
ATOM	12861	N	LEU	1919	32.944	-27.013	22.778	1.00	14.71
ATOM	12862	CA	LEU	1919	32.021	-26.761	23.891	1.00	14.78
ATOM	12863	CB	LEU	1919	30.682	-27.454	23.626	1.00	15.37
ATOM	12864	CG	LEU	1919	29.808	-26.866	22.519	1.00	17.11
ATOM	12865	CD1	LEU	1919	28.579	-27.749	22.330	1.00	18.09
ATOM	12866	CD2	LEU	1919	29.400	-25.442	22.894	1.00	16.88
ATOM	12867	C	LEU	1919	32.530	-27.206	25.259	1.00	14.85
ATOM	12868	O	LEU	1919	31.896	-26.926	26.270	1.00	12.57
ATOM	12869	N	VAL	1920	33.667	-27.893	25.298	1.00	15.61
ATOM	12870	CA	VAL	1920	34.189	-28.386	26.569	1.00	15.42
ATOM	12871	CB	VAL	1920	35.582	-29.008	26.379	1.00	16.95
ATOM	12872	CG1	VAL	1920	36.302	-29.125	27.717	1.00	16.07
ATOM	12873	CG2	VAL	1920	35.425	-30.389	25.764	1.00	15.13
ATOM	12874	C	VAL	1920	34.216	-27.366	27.707	1.00	16.07
ATOM	12875	O	VAL	1920	33.758	-27.662	28.808	1.00	15.60
ATOM	12876	N	GLU	1921	34.737	-26.172	27.448	1.00	15.79
ATOM	12877	CA	GLU	1921	34.785	-25.141	28.483	1.00	16.09
ATOM	12878	CB	GLU	1921	35.480	-23.888	27.949	1.00	18.74
ATOM	12879	CG	GLU	1921	35.428	-22.701	28.889	1.00	24.44
ATOM	12880	CD	GLU	1921	36.271	-21.543	28.394	1.00	27.12
ATOM	12881	OE1	GLU	1921	36.105	-21.136	27.224	1.00	28.89
ATOM	12882	OE2	GLU	1921	37.104	-21.045	29.177	1.00	30.38
ATOM	12883	C	GLU	1921	33.373	-24.780	28.935	1.00	15.64
ATOM	12884	O	GLU	1921	33.095	-24.650	30.128	1.00	14.95
ATOM	12885	N	THR	1922	32.478	-24.623	27.971	1.00	16.48
ATOM	12886	CA	THR	1922	31.102	-24.268	28.289	1.00	15.13
ATOM	12887	CB	THR	1922	30.285	-24.074	27.017	1.00	14.39

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ATOM   12888  OG1 THR  1922      30.846 -22.993  26.265  1.00 14.42
ATOM   12889  CG2 THR  1922      28.834 -23.753  27.354  1.00 13.35
ATOM   12890  C   THR  1922      30.439 -25.321  29.161  1.00 13.15
ATOM   12891  O   THR  1922      29.759 -24.990  30.136  1.00 13.84
ATOM   12892  N   VAL  1923      30.632 -26.589  28.815  1.00 14.02
ATOM   12893  CA  VAL  1923      30.042 -27.671  29.590  1.00 13.28
ATOM   12894  CB  VAL  1923      30.285 -29.039  28.911  1.00 13.90
ATOM   12895  CG1 VAL  1923      29.800 -30.171  29.818  1.00 14.64
ATOM   12896  CG2 VAL  1923      29.552 -29.080  27.584  1.00 14.39
ATOM   12897  C   VAL  1923      30.611 -27.687  31.000  1.00 15.48
ATOM   12898  O   VAL  1923      29.863 -27.755  31.982  1.00 12.62
ATOM   12899  N   GLN  1924      31.932 -27.598  31.109  1.00 15.37
ATOM   12900  CA  GLN  1924      32.566 -27.606  32.434  1.00 17.23
ATOM   12901  CB  GLN  1924      34.087 -27.396  32.310  1.00 19.46
ATOM   12902  CG  GLN  1924      34.796 -28.434  31.437  1.00 23.92
ATOM   12903  CD  GLN  1924      36.306 -28.223  31.344  1.00 28.58
ATOM   12904  OE1 GLN  1924      36.778 -27.120  31.054  1.00 27.54
ATOM   12905  NE2 GLN  1924      37.069 -29.293  31.575  1.00 28.43
ATOM   12906  C   GLN  1924      31.966 -26.527  33.344  1.00 16.21
ATOM   12907  O   GLN  1924      31.576 -26.811  34.470  1.00 15.27
ATOM   12908  N   MET  1925      31.881 -25.299  32.843  1.00 15.24
ATOM   12909  CA  MET  1925      31.356 -24.188  33.624  1.00 14.73
ATOM   12910  CB  MET  1925      31.688 -22.875  32.921  1.00 17.14
ATOM   12911  CG  MET  1925      33.189 -22.574  32.914  1.00 17.57
ATOM   12912  SD  MET  1925      33.579 -21.081  31.980  1.00 19.95
ATOM   12913  CE  MET  1925      33.416 -19.842  33.296  1.00 22.55
ATOM   12914  C   MET  1925      29.872 -24.267  33.944  1.00 15.19
ATOM   12915  O   MET  1925      29.452 -23.902  35.044  1.00 12.00
ATOM   12916  N   LEU  1926      29.070 -24.735  32.995  1.00 13.48
ATOM   12917  CA  LEU  1926      27.638 -24.868  33.240  1.00 14.38
ATOM   12918  CB  LEU  1926      26.934 -25.398  31.989  1.00 12.37
ATOM   12919  CG  LEU  1926      26.531 -24.365  30.944  1.00 10.67
ATOM   12920  CD1 LEU  1926      26.209 -25.077  29.631  1.00 10.46
ATOM   12921  CD2 LEU  1926      25.320 -23.570  31.450  1.00 11.83
ATOM   12922  C   LEU  1926      27.389 -25.827  34.391  1.00 15.78
ATOM   12923  O   LEU  1926      26.604 -25.542  35.298  1.00 14.90
ATOM   12924  N   THR  1927      28.061 -26.974  34.348  1.00 17.82
ATOM   12925  CA  THR  1927      27.891 -27.988  35.385  1.00 19.33
ATOM   12926  CB  THR  1927      28.736 -29.236  35.074  1.00 22.11
ATOM   12927  OG1 THR  1927      28.239 -29.852  33.873  1.00 23.96
ATOM   12928  CG2 THR  1927      28.653 -30.240  36.219  1.00 26.37
ATOM   12929  C   THR  1927      28.222 -27.472  36.780  1.00 20.67
ATOM   12930  O   THR  1927      27.482 -27.738  37.731  1.00 19.83
ATOM   12931  N   GLU  1928      29.325 -26.741  36.926  1.00 19.57
ATOM   12932  CA  GLU  1928      29.639 -26.217  38.254  1.00 20.59
ATOM   12933  CB  GLU  1928      31.087 -25.716  38.340  1.00 23.01
ATOM   12934  CG  GLU  1928      31.562 -24.901  37.176  1.00 24.98
ATOM   12935  CD  GLU  1928      32.983 -24.379  37.372  1.00 25.34
ATOM   12936  OE1 GLU  1928      33.819 -25.097  37.963  1.00 28.59
ATOM   12937  OE2 GLU  1928      33.271 -23.258  36.920  1.00 24.69
ATOM   12938  C   GLU  1928      28.648 -25.121  38.649  1.00 19.64
ATOM   12939  O   GLU  1928      28.514 -24.801  39.830  1.00 20.05
ATOM   12940  N   ARG  1929      27.943 -24.558  37.666  1.00 16.54
ATOM   12941  CA  ARG  1929      26.938 -23.536  37.948  1.00 15.92
ATOM   12942  CB  ARG  1929      27.001 -22.425  36.901  1.00 15.43
ATOM   12943  CG  ARG  1929      28.222 -21.543  37.095  1.00 16.86
ATOM   12944  CD  ARG  1929      28.530 -20.685  35.884  1.00 16.91
ATOM   12945  NE  ARG  1929      29.786 -19.956  36.071  1.00 15.63
ATOM   12946  CZ  ARG  1929      30.972 -20.533  36.258  1.00 17.47
ATOM   12947  NH1 ARG  1929      31.080 -21.855  36.284  1.00 20.43
ATOM   12948  NH2 ARG  1929      32.056 -19.786  36.418  1.00 17.19
ATOM   12949  C   ARG  1929      25.531 -24.134  38.032  1.00 16.03
ATOM   12950  O   ARG  1929      24.528 -23.480  37.724  1.00 15.35
ATOM   12951  N   ALA  1930      25.492 -25.398  38.446  1.00 15.30
ATOM   12952  CA  ALA  1930      24.262 -26.152  38.674  1.00 14.02
ATOM   12953  CB  ALA  1930      23.364 -25.373  39.645  1.00 17.52
ATOM   12954  C   ALA  1930      23.437 -26.610  37.473  1.00 14.90
ATOM   12955  O   ALA  1930      22.302 -27.051  37.655  1.00 12.87
ATOM   12956  N   VAL  1931      23.974 -26.510  36.260  1.00 13.13
ATOM   12957  CA  VAL  1931      23.217 -26.948  35.100  1.00 13.22
ATOM   12958  CB  VAL  1931      23.220 -25.876  33.974  1.00 14.49
ATOM   12959  CG1 VAL  1931      22.325 -26.328  32.829  1.00 11.71
ATOM   12960  CG2 VAL  1931      22.746 -24.539  34.522  1.00 14.16
ATOM   12961  C   VAL  1931      23.752 -28.239  34.492  1.00 13.32
ATOM   12962  O   VAL  1931      24.905 -28.296  34.046  1.00 13.87
ATOM   12963  N   PRO  1932      22.940 -29.307  34.502  1.00 13.80
ATOM   12964  CD  PRO  1932      21.715 -29.508  35.290  1.00 14.21
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ATOM   12965  CA   PRO  1932     23.395 -30.567  33.908  1.00 13.32
ATOM   12966  CB   PRO  1932     22.396 -31.596  34.437  1.00 15.25
ATOM   12967  CG   PRO  1932     21.178 -30.791  34.712  1.00 20.66
ATOM   12968  C    PRO  1932     23.310 -30.391  32.396  1.00 11.97
ATOM   12969  O    PRO  1932     22.413 -29.713  31.897  1.00 12.08
ATOM   12970  N    VAL  1933     24.228 -31.012  31.669  1.00 11.35
ATOM   12971  CA   VAL  1933     24.270 -30.869  30.218  1.00 11.25
ATOM   12972  CB   VAL  1933     25.577 -30.149  29.793  1.00 12.56
ATOM   12973  CG1  VAL  1933     25.676 -30.079  28.280  1.00 10.86
ATOM   12974  CG2  VAL  1933     25.634 -28.768  30.411  1.00 10.60
ATOM   12975  C    VAL  1933     24.205 -32.194  29.474  1.00 13.16
ATOM   12976  O    VAL  1933     24.850 -33.170  29.853  1.00 12.41
ATOM   12977  N    CYS  1934     23.417 -32.218  28.411  1.00 11.26
ATOM   12978  CA   CYS  1934     23.298 -33.393  27.574  1.00 11.02
ATOM   12979  CB   CYS  1934     21.822 -33.687  27.271  1.00 11.90
ATOM   12980  SG   CYS  1934     21.573 -35.022  26.038  1.00 13.45
ATOM   12981  C    CYS  1934     24.031 -32.993  26.301  1.00 13.27
ATOM   12982  O    CYS  1934     23.773 -31.929  25.739  1.00 12.86
ATOM   12983  N    GLY  1935     24.978 -33.817  25.872  1.00 12.09
ATOM   12984  CA   GLY  1935     25.705 -33.515  24.655  1.00 10.39
ATOM   12985  C    GLY  1935     24.870 -33.961  23.475  1.00 11.98
ATOM   12986  O    GLY  1935     23.843 -34.627  23.654  1.00 12.33
ATOM   12987  N    HIS  1936     25.305 -33.601  22.272  1.00 10.95
ATOM   12988  CA   HIS  1936     24.585 -33.957  21.054  1.00 13.54
ATOM   12989  CB   HIS  1936     23.453 -32.945  20.813  1.00 13.71
ATOM   12990  CG   HIS  1936     22.547 -33.285  19.669  1.00 16.35
ATOM   12991  CD2  HIS  1936     22.722 -34.088  18.593  1.00 17.45
ATOM   12992  ND1  HIS  1936     21.297 -32.719  19.522  1.00 13.36
ATOM   12993  CE1  HIS  1936     20.745 -33.155  18.406  1.00 17.41
ATOM   12994  NE2  HIS  1936     21.589 -33.986  17.821  1.00 19.02
ATOM   12995  C    HIS  1936     25.568 -33.974  19.889  1.00 12.21
ATOM   12996  O    HIS  1936     26.069 -32.929  19.460  1.00 12.99
ATOM   12997  N    LEU  1937     25.825 -35.176  19.382  1.00 13.16
ATOM   12998  CA   LEU  1937     26.767 -35.384  18.287  1.00 12.94
ATOM   12999  CB   LEU  1937     27.994 -36.157  18.797  1.00 12.68
ATOM   13000  CG   LEU  1937     28.833 -35.486  19.884  1.00 13.53
ATOM   13001  CD1  LEU  1937     29.914 -36.448  20.395  1.00 15.18
ATOM   13002  CD2  LEU  1937     29.449 -34.228  19.334  1.00 12.64
ATOM   13003  C    LEU  1937     26.141 -36.137  17.126  1.00 14.83
ATOM   13004  O    LEU  1937     25.103 -36.785  17.274  1.00 12.98
ATOM   13005  N    GLY  1938     26.792 -36.055  15.972  1.00 16.63
ATOM   13006  CA   GLY  1938     26.283 -36.719  14.790  1.00 22.86
ATOM   13007  C    GLY  1938     25.712 -35.675  13.854  1.00 27.34
ATOM   13008  O    GLY  1938     26.411 -34.740  13.466  1.00 27.92
ATOM   13009  N    LEU  1939     24.438 -35.824  13.504  1.00 30.73
ATOM   13010  CA   LEU  1939     23.766 -34.889  12.611  1.00 34.21
ATOM   13011  CB   LEU  1939     22.714 -35.638  11.786  1.00 35.61
ATOM   13012  CG   LEU  1939     22.029 -34.928  10.615  1.00 37.63
ATOM   13013  CD1  LEU  1939     21.406 -35.969   9.702  1.00 38.32
ATOM   13014  CD2  LEU  1939     20.973 -33.955  11.127  1.00 38.51
ATOM   13015  C    LEU  1939     23.116 -33.768  13.420  1.00 36.56
ATOM   13016  O    LEU  1939     22.114 -33.980  14.101  1.00 37.71
ATOM   13017  N    THR  1940     23.700 -32.576  13.343  1.00 38.68
ATOM   13018  CA   THR  1940     23.192 -31.417  14.070  1.00 40.34
ATOM   13019  CB   THR  1940     24.337 -30.684  14.791  1.00 40.75
ATOM   13020  OG1  THR  1940     25.398 -30.420  13.864  1.00 39.49
ATOM   13021  CG2  THR  1940     24.867 -31.530  15.934  1.00 41.22
ATOM   13022  C    THR  1940     22.490 -30.447  13.124  1.00 41.01
ATOM   13023  O    THR  1940     23.139 -29.714  12.379  1.00 42.38
ATOM   13024  N    PRO  1941     21.147 -30.430  13.152  1.00 42.07
ATOM   13025  CD   PRO  1941     20.294 -31.239  14.041  1.00 43.13
ATOM   13026  CA   PRO  1941     20.333 -29.558  12.297  1.00 42.02
ATOM   13027  CB   PRO  1941     18.903 -29.997  12.615  1.00 42.88
ATOM   13028  CG   PRO  1941     18.995 -30.474  14.019  1.00 44.03
ATOM   13029  C    PRO  1941     20.549 -28.058  12.486  1.00 41.54
ATOM   13030  O    PRO  1941     20.198 -27.265  11.611  1.00 41.77
ATOM   13031  N    GLN  1942     21.121 -27.663  13.619  1.00 40.66
ATOM   13032  CA   GLN  1942     21.376 -26.245  13.857  1.00 40.39
ATOM   13033  CB   GLN  1942     21.804 -26.012  15.307  1.00 39.97
ATOM   13034  CG   GLN  1942     20.658 -25.656  16.244  1.00 38.76
ATOM   13035  CD   GLN  1942     21.086 -25.620  17.701  1.00 38.71
ATOM   13036  OE1  GLN  1942     22.092 -24.999  18.053  1.00 35.82
ATOM   13037  NE2  GLN  1942     20.316 -26.284  18.559  1.00 36.70
ATOM   13038  C    GLN  1942     22.450 -25.722  12.906  1.00 40.11
ATOM   13039  O    GLN  1942     22.541 -24.519  12.660  1.00 39.36
ATOM   13040  N    SER  1943     23.256 -26.637  12.372  1.00 40.02
ATOM   13041  CA   SER  1943     24.329 -26.281  11.443  1.00 39.90
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ATOM	13042	CB	SER	1943	25.637	-26.959	11.862	1.00	40.15
ATOM	13043	OG	SER	1943	25.992	-26.629	13.195	1.00	42.09
ATOM	13044	C	SER	1943	23.978	-26.703	10.017	1.00	39.67
ATOM	13045	O	SER	1943	24.864	-26.933	9.194	1.00	38.51
ATOM	13046	N	VAL	1944	22.682	-26.805	9.734	1.00	40.21
ATOM	13047	CA	VAL	1944	22.209	-27.205	8.411	1.00	40.13
ATOM	13048	CB	VAL	1944	20.660	-27.155	8.335	1.00	40.32
ATOM	13049	CG1	VAL	1944	20.160	-25.763	8.698	1.00	40.26
ATOM	13050	CG2	VAL	1944	20.196	-27.547	6.936	1.00	40.12
ATOM	13051	C	VAL	1944	22.794	-26.352	7.284	1.00	40.09
ATOM	13052	O	VAL	1944	23.178	-26.873	6.236	1.00	40.03
ATOM	13053	N	ASN	1945	22.862	-25.043	7.501	1.00	40.77
ATOM	13054	CA	ASN	1945	23.397	-24.128	6.498	1.00	42.02
ATOM	13055	CB	ASN	1945	23.120	-22.681	6.911	1.00	39.36
ATOM	13056	CG	ASN	1945	21.634	-22.388	7.028	1.00	38.68
ATOM	13057	OD1	ASN	1945	20.905	-22.428	6.035	1.00	33.53
ATOM	13058	ND2	ASN	1945	21.176	-22.102	8.244	1.00	34.93
ATOM	13059	C	ASN	1945	24.893	-24.336	6.292	1.00	43.74
ATOM	13060	O	ASN	1945	25.413	-24.102	5.200	1.00	43.69
ATOM	13061	N	ILE	1946	25.579	-24.774	7.344	1.00	46.06
ATOM	13062	CA	ILE	1946	27.014	-25.024	7.275	1.00	48.85
ATOM	13063	CB	ILE	1946	27.590	-25.387	8.664	1.00	48.08
ATOM	13064	CG2	ILE	1946	29.044	-25.828	8.527	1.00	48.67
ATOM	13065	CG1	ILE	1946	27.476	-24.188	9.609	1.00	47.10
ATOM	13066	CD1	ILE	1946	28.319	-22.994	9.203	1.00	45.47
ATOM	13067	C	ILE	1946	27.294	-26.176	6.316	1.00	51.55
ATOM	13068	O	ILE	1946	27.949	-26.001	5.287	1.00	51.88
ATOM	13069	N	PHE	1947	26.788	-27.354	6.666	1.00	54.57
ATOM	13070	CA	PHE	1947	26.970	-28.551	5.855	1.00	57.12
ATOM	13071	CB	PHE	1947	26.427	-29.770	6.605	1.00	59.02
ATOM	13072	CG	PHE	1947	27.106	-30.023	7.924	1.00	61.39
ATOM	13073	CD1	PHE	1947	28.397	-30.544	7.969	1.00	62.43
ATOM	13074	CD2	PHE	1947	26.461	-29.726	9.121	1.00	61.93
ATOM	13075	CE1	PHE	1947	29.036	-30.767	9.189	1.00	62.77
ATOM	13076	CE2	PHE	1947	27.090	-29.945	10.345	1.00	62.58
ATOM	13077	CZ	PHE	1947	28.380	-30.467	10.379	1.00	62.90
ATOM	13078	C	PHE	1947	26.260	-28.407	4.514	1.00	58.08
ATOM	13079	O	PHE	1947	26.884	-28.505	3.455	1.00	59.24
ATOM	13080	N	GLY	1948	24.954	-28.169	4.566	1.00	58.06
ATOM	13081	CA	GLY	1948	24.180	-28.015	3.349	1.00	58.62
ATOM	13082	C	GLY	1948	22.862	-28.761	3.410	1.00	59.00
ATOM	13083	O	GLY	1948	22.084	-28.740	2.458	1.00	58.82
ATOM	13084	N	GLY	1949	22.613	-29.420	4.537	1.00	59.35
ATOM	13085	CA	GLY	1949	21.381	-30.168	4.701	1.00	60.55
ATOM	13086	C	GLY	1949	21.459	-31.129	5.870	1.00	61.51
ATOM	13087	O	GLY	1949	22.026	-30.801	6.914	1.00	61.37
ATOM	13088	N	TYR	1950	20.889	-32.319	5.695	1.00	62.15
ATOM	13089	CA	TYR	1950	20.898	-33.337	6.745	1.00	62.76
ATOM	13090	CB	TYR	1950	19.524	-33.419	7.420	1.00	63.27
ATOM	13091	CG	TYR	1950	18.892	-32.075	7.706	1.00	63.93
ATOM	13092	CD1	TYR	1950	18.228	-31.368	6.702	1.00	64.37
ATOM	13093	CE1	TYR	1950	17.653	-30.124	6.955	1.00	64.90
ATOM	13094	CD2	TYR	1950	18.967	-31.502	8.975	1.00	64.29
ATOM	13095	CE2	TYR	1950	18.398	-30.258	9.239	1.00	64.47
ATOM	13096	CZ	TYR	1950	17.741	-29.576	8.225	1.00	65.14
ATOM	13097	OH	TYR	1950	17.169	-28.347	8.477	1.00	65.21
ATOM	13098	C	TYR	1950	21.266	-34.703	6.163	1.00	62.54
ATOM	13099	O	TYR	1950	20.515	-35.272	5.371	1.00	62.37
ATOM	13100	N	LYS	1951	22.423	-35.223	6.564	1.00	62.40
ATOM	13101	CA	LYS	1951	22.898	-36.517	6.081	1.00	62.04
ATOM	13102	CB	LYS	1951	23.874	-36.315	4.919	1.00	62.86
ATOM	13103	CG	LYS	1951	23.260	-35.611	3.721	1.00	64.49
ATOM	13104	CD	LYS	1951	24.309	-35.241	2.688	1.00	65.92
ATOM	13105	CE	LYS	1951	23.687	-34.471	1.532	1.00	66.41
ATOM	13106	NZ	LYS	1951	24.709	-33.991	0.560	1.00	67.31
ATOM	13107	C	LYS	1951	23.579	-37.316	7.190	1.00	60.75
ATOM	13108	O	LYS	1951	24.018	-36.755	8.195	1.00	60.94
ATOM	13109	N	VAL	1952	23.659	-38.630	6.999	1.00	58.89
ATOM	13110	CA	VAL	1952	24.284	-39.511	7.979	1.00	57.24
ATOM	13111	CB	VAL	1952	24.287	-40.975	7.491	1.00	57.00
ATOM	13112	CG1	VAL	1952	24.913	-41.875	8.545	1.00	57.09
ATOM	13113	CG2	VAL	1952	22.868	-41.422	7.184	1.00	56.86
ATOM	13114	C	VAL	1952	25.722	-39.079	8.243	1.00	56.27
ATOM	13115	O	VAL	1952	26.511	-38.917	7.313	1.00	55.83
ATOM	13116	N	GLN	1953	26.055	-38.898	9.517	1.00	54.84
ATOM	13117	CA	GLN	1953	27.395	-38.479	9.907	1.00	53.67
ATOM	13118	CB	GLN	1953	27.303	-37.270	10.841	1.00	53.92

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ATOM   13119  CG   GLN  1953      28.623 -36.560  11.083  1.00 55.91
ATOM   13120  CD   GLN  1953      29.188 -35.934   9.820  1.00 56.76
ATOM   13121  OE1  GLN  1953      28.532 -35.114   9.174  1.00 55.89
ATOM   13122  NE2  GLN  1953      30.413 -36.318   9.463  1.00 56.77
ATOM   13123  C    GLN  1953      28.137 -39.623  10.600  1.00 52.67
ATOM   13124  O    GLN  1953      27.517 -40.550  11.116  1.00 52.18
ATOM   13125  N    GLY  1954      29.466 -39.558  10.598  1.00 51.97
ATOM   13126  CA   GLY  1954      30.256 -40.598  11.236  1.00 51.94
ATOM   13127  C    GLY  1954      30.855 -41.601  10.266  1.00 51.75
ATOM   13128  O    GLY  1954      31.612 -42.488  10.664  1.00 51.15
ATOM   13129  N    ARG  1955      30.514 -41.462   8.990  1.00 51.95
ATOM   13130  CA   ARG  1955      31.018 -42.353   7.953  1.00 52.89
ATOM   13131  CB   ARG  1955      30.331 -42.042   6.619  1.00 54.06
ATOM   13132  CG   ARG  1955      28.840 -42.353   6.588  1.00 56.32
ATOM   13133  CD   ARG  1955      28.588 -43.852   6.597  1.00 58.03
ATOM   13134  NE   ARG  1955      27.164 -44.184   6.599  1.00 59.33
ATOM   13135  CZ   ARG  1955      26.313 -43.872   5.625  1.00 59.73
ATOM   13136  NH1  ARG  1955      26.735 -43.212   4.554  1.00 59.72
ATOM   13137  NH2  ARG  1955      25.036 -44.223   5.720  1.00 60.10
ATOM   13138  C    ARG  1955      32.529 -42.205   7.797  1.00 52.91
ATOM   13139  O    ARG  1955      33.034 -41.102   7.582  1.00 52.93
ATOM   13140  N    GLY  1956      33.245 -43.320   7.909  1.00 52.81
ATOM   13141  CA   GLY  1956      34.692 -43.290   7.771  1.00 52.45
ATOM   13142  C    GLY  1956      35.420 -43.286   9.101  1.00 51.95
ATOM   13143  O    GLY  1956      34.882 -42.834  10.110  1.00 52.28
ATOM   13144  N    ASP  1957      36.650 -43.787   9.101  1.00 51.06
ATOM   13145  CA   ASP  1957      37.450 -43.841  10.319  1.00 50.18
ATOM   13146  CB   ASP  1957      38.777 -44.553  10.050  1.00 52.74
ATOM   13147  CG   ASP  1957      38.584 -45.974   9.572  1.00 55.34
ATOM   13148  OD1  ASP  1957      37.909 -46.752  10.283  1.00 56.35
ATOM   13149  OD2  ASP  1957      39.109 -46.315   8.489  1.00 57.00
ATOM   13150  C    ASP  1957      37.727 -42.446  10.867  1.00 47.95
ATOM   13151  O    ASP  1957      37.620 -42.209  12.069  1.00 47.47
ATOM   13152  N    GLU  1958      38.087 -41.529   9.977  1.00 45.13
ATOM   13153  CA   GLU  1958      38.387 -40.160  10.368  1.00 43.01
ATOM   13154  CB   GLU  1958      38.677 -39.318   9.127  1.00 45.74
ATOM   13155  CG   GLU  1958      39.190 -37.924   9.429  1.00 48.92
ATOM   13156  CD   GLU  1958      39.353 -37.092   8.174  1.00 51.94
ATOM   13157  OE1  GLU  1958      39.989 -37.585   7.215  1.00 52.78
ATOM   13158  OE2  GLU  1958      38.850 -35.947   8.148  1.00 53.38
ATOM   13159  C    GLU  1958      37.231 -39.540  11.146  1.00 40.27
ATOM   13160  O    GLU  1958      37.380 -39.175  12.313  1.00 37.28
ATOM   13161  N    ALA  1959      36.079 -39.424  10.493  1.00 36.37
ATOM   13162  CA   ALA  1959      34.900 -38.846  11.129  1.00 34.01
ATOM   13163  CB   ALA  1959      33.754 -38.760  10.130  1.00 33.11
ATOM   13164  C    ALA  1959      34.484 -39.683  12.333  1.00 31.93
ATOM   13165  O    ALA  1959      34.046 -39.149  13.353  1.00 31.65
ATOM   13166  N    GLY  1960      34.625 -40.997  12.203  1.00 30.55
ATOM   13167  CA   GLY  1960      34.262 -41.895  13.283  1.00 29.48
ATOM   13168  C    GLY  1960      35.089 -41.676  14.535  1.00 28.48
ATOM   13169  O    GLY  1960      34.553 -41.644  15.644  1.00 27.01
ATOM   13170  N    ASP  1961      36.397 -41.520  14.365  1.00 27.04
ATOM   13171  CA   ASP  1961      37.284 -41.310  15.502  1.00 27.15
ATOM   13172  CB   ASP  1961      38.752 -41.439  15.076  1.00 29.17
ATOM   13173  CG   ASP  1961      39.120 -42.849  14.653  1.00 31.98
ATOM   13174  OD1  ASP  1961      38.398 -43.797  15.040  1.00 30.19
ATOM   13175  OD2  ASP  1961      40.143 -43.009  13.944  1.00 33.17
ATOM   13176  C    ASP  1961      37.053 -39.947  16.135  1.00 25.99
ATOM   13177  O    ASP  1961      37.114 -39.803  17.358  1.00 25.23
ATOM   13178  N    GLN  1962      36.791 -38.945  15.301  1.00 24.65
ATOM   13179  CA   GLN  1962      36.549 -37.598  15.803  1.00 24.43
ATOM   13180  CB   GLN  1962      36.404 -36.613  14.644  1.00 25.79
ATOM   13181  CG   GLN  1962      36.228 -35.174  15.095  1.00 28.89
ATOM   13182  CD   GLN  1962      37.400 -34.677  15.912  1.00 31.20
ATOM   13183  OE1  GLN  1962      38.524 -34.600  15.419  1.00 31.16
ATOM   13184  NE2  GLN  1962      37.144 -34.339  17.172  1.00 32.91
ATOM   13185  C    GLN  1962      35.295 -37.556  16.678  1.00 22.32
ATOM   13186  O    GLN  1962      35.267 -36.860  17.691  1.00 20.87
ATOM   13187  N    LEU  1963      34.258 -38.294  16.285  1.00 21.33
ATOM   13188  CA   LEU  1963      33.032 -38.323  17.068  1.00 21.71
ATOM   13189  CB   LEU  1963      31.900 -39.012  16.293  1.00 22.46
ATOM   13190  CG   LEU  1963      31.338 -38.237  15.092  1.00 28.54
ATOM   13191  CD1  LEU  1963      30.208 -39.027  14.450  1.00 28.46
ATOM   13192  CD2  LEU  1963      30.822 -36.868  15.550  1.00 27.56
ATOM   13193  C    LEU  1963      33.274 -39.044  18.392  1.00 20.51
ATOM   13194  O    LEU  1963      32.745 -38.641  19.425  1.00 18.17
ATOM   13195  N    LEU  1964      34.074 -40.109  18.359  1.00 19.90
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ATOM	13196	CA	LEU	1964	34.387	-40.860	19.573	1.00	18.82
ATOM	13197	CB	LEU	1964	35.293	-42.060	19.258	1.00	19.20
ATOM	13198	CG	LEU	1964	35.150	-43.326	20.114	1.00	22.73
ATOM	13199	CD1	LEU	1964	36.408	-44.170	19.984	1.00	21.26
ATOM	13200	CD2	LEU	1964	34.908	-42.985	21.568	1.00	21.92
ATOM	13201	C	LEU	1964	35.125	-39.916	20.513	1.00	18.01
ATOM	13202	O	LEU	1964	34.827	-39.843	21.704	1.00	16.75
ATOM	13203	N	SER	1965	36.097	-39.197	19.958	1.00	19.21
ATOM	13204	CA	SER	1965	36.891	-38.251	20.726	1.00	18.88
ATOM	13205	CB	SER	1965	37.939	-37.586	19.834	1.00	19.39
ATOM	13206	OG	SER	1965	38.736	-36.691	20.592	1.00	21.10
ATOM	13207	C	SER	1965	36.017	-37.179	21.354	1.00	17.02
ATOM	13208	O	SER	1965	36.122	-36.915	22.550	1.00	15.35
ATOM	13209	N	ASP	1966	35.156	-36.558	20.549	1.00	16.60
ATOM	13210	CA	ASP	1966	34.278	-35.509	21.071	1.00	17.92
ATOM	13211	CB	ASP	1966	33.404	-34.910	19.964	1.00	18.63
ATOM	13212	CG	ASP	1966	34.197	-34.078	18.974	1.00	19.16
ATOM	13213	OD1	ASP	1966	35.254	-33.536	19.352	1.00	24.28
ATOM	13214	OD2	ASP	1966	33.745	-33.954	17.819	1.00	20.44
ATOM	13215	C	ASP	1966	33.378	-36.061	22.170	1.00	15.95
ATOM	13216	O	ASP	1966	33.162	-35.409	23.194	1.00	15.58
ATOM	13217	N	ALA	1967	32.852	-37.263	21.955	1.00	15.46
ATOM	13218	CA	ALA	1967	31.980	-37.889	22.946	1.00	13.99
ATOM	13219	CB	ALA	1967	31.536	-39.264	22.454	1.00	13.81
ATOM	13220	C	ALA	1967	32.703	-38.012	24.280	1.00	14.10
ATOM	13221	O	ALA	1967	32.157	-37.674	25.333	1.00	14.44
ATOM	13222	N	LEU	1968	33.944	-38.490	24.240	1.00	13.09
ATOM	13223	CA	LEU	1968	34.724	-38.650	25.463	1.00	13.85
ATOM	13224	CB	LEU	1968	36.010	-39.434	25.164	1.00	14.52
ATOM	13225	CG	LEU	1968	35.805	-40.946	24.954	1.00	14.84
ATOM	13226	CD1	LEU	1968	37.006	-41.547	24.234	1.00	16.18
ATOM	13227	CD2	LEU	1968	35.599	-41.618	26.306	1.00	17.51
ATOM	13228	C	LEU	1968	35.062	-37.293	26.088	1.00	13.86
ATOM	13229	O	LEU	1968	35.056	-37.157	27.309	1.00	14.68
ATOM	13230	N	ALA	1969	35.342	-36.290	25.257	1.00	14.00
ATOM	13231	CA	ALA	1969	35.672	-34.957	25.769	1.00	14.01
ATOM	13232	CB	ALA	1969	36.150	-34.057	24.634	1.00	14.15
ATOM	13233	C	ALA	1969	34.468	-34.325	26.462	1.00	13.52
ATOM	13234	O	ALA	1969	34.609	-33.634	27.476	1.00	12.39
ATOM	13235	N	LEU	1970	33.283	-34.552	25.909	1.00	15.34
ATOM	13236	CA	LEU	1970	32.060	-34.005	26.502	1.00	14.25
ATOM	13237	CB	LEU	1970	30.869	-34.220	25.563	1.00	15.21
ATOM	13238	CG	LEU	1970	30.929	-33.394	24.272	1.00	16.66
ATOM	13239	CD1	LEU	1970	29.795	-33.811	23.329	1.00	17.51
ATOM	13240	CD2	LEU	1970	30.815	-31.913	24.610	1.00	16.43
ATOM	13241	C	LEU	1970	31.806	-34.661	27.848	1.00	13.96
ATOM	13242	O	LEU	1970	31.474	-33.982	28.824	1.00	12.41
ATOM	13243	N	GLU	1971	31.981	-35.980	27.907	1.00	12.89
ATOM	13244	CA	GLU	1971	31.787	-36.705	29.162	1.00	14.56
ATOM	13245	CB	GLU	1971	31.951	-38.224	28.945	1.00	16.29
ATOM	13246	CG	GLU	1971	31.840	-39.074	30.226	1.00	15.90
ATOM	13247	CD	GLU	1971	32.114	-40.557	29.981	1.00	15.83
ATOM	13248	OE1	GLU	1971	33.169	-40.888	29.415	1.00	18.88
ATOM	13249	OE2	GLU	1971	31.279	-41.392	30.358	1.00	19.45
ATOM	13250	C	GLU	1971	32.805	-36.207	30.195	1.00	15.16
ATOM	13251	O	GLU	1971	32.465	-35.965	31.353	1.00	13.13
ATOM	13252	N	ALA	1972	34.055	-36.039	29.774	1.00	14.67
ATOM	13253	CA	ALA	1972	35.087	-35.589	30.695	1.00	15.71
ATOM	13254	CB	ALA	1972	36.465	-35.643	30.015	1.00	15.78
ATOM	13255	C	ALA	1972	34.802	-34.181	31.192	1.00	15.67
ATOM	13256	O	ALA	1972	35.151	-33.832	32.323	1.00	17.06
ATOM	13257	N	ALA	1973	34.167	-33.377	30.342	1.00	16.83
ATOM	13258	CA	ALA	1973	33.826	-31.993	30.673	1.00	16.03
ATOM	13259	CB	ALA	1973	33.434	-31.243	29.399	1.00	17.16
ATOM	13260	C	ALA	1973	32.690	-31.924	31.694	1.00	16.25
ATOM	13261	O	ALA	1973	32.499	-30.900	32.354	1.00	16.68
ATOM	13262	N	GLY	1974	31.939	-33.013	31.824	1.00	15.27
ATOM	13263	CA	GLY	1974	30.857	-33.037	32.790	1.00	15.24
ATOM	13264	C	GLY	1974	29.473	-33.342	32.251	1.00	13.22
ATOM	13265	O	GLY	1974	28.498	-33.327	33.008	1.00	13.69
ATOM	13266	N	ALA	1975	29.357	-33.606	30.954	1.00	13.87
ATOM	13267	CA	ALA	1975	28.038	-33.927	30.396	1.00	12.92
ATOM	13268	CB	ALA	1975	28.126	-34.066	28.888	1.00	12.07
ATOM	13269	C	ALA	1975	27.581	-35.243	31.031	1.00	12.54
ATOM	13270	O	ALA	1975	28.364	-36.188	31.104	1.00	11.18
ATOM	13271	N	GLN	1976	26.330	-35.304	31.492	1.00	11.89
ATOM	13272	CA	GLN	1976	25.803	-36.514	32.132	1.00	11.40

ATOM	13273	CB	GLN	1976	25.009	-36.150	33.387	1.00	12.41
ATOM	13274	CG	GLN	1976	25.890	-35.701	34.561	1.00	15.82
ATOM	13275	CD	GLN	1976	25.091	-35.135	35.720	1.00	16.62
ATOM	13276	OE1	GLN	1976	24.747	-35.845	36.671	1.00	21.24
ATOM	13277	NE2	GLN	1976	24.784	-33.847	35.641	1.00	14.90
ATOM	13278	C	GLN	1976	24.931	-37.348	31.196	1.00	11.43
ATOM	13279	O	GLN	1976	24.407	-38.397	31.581	1.00	11.61
ATOM	13280	N	LEU	1977	24.780	-36.862	29.970	1.00	10.84
ATOM	13281	CA	LEU	1977	23.986	-37.533	28.957	1.00	12.72
ATOM	13282	CB	LEU	1977	22.510	-37.145	29.089	1.00	15.93
ATOM	13283	CG	LEU	1977	21.602	-38.134	29.806	1.00	21.02
ATOM	13284	CD1	LEU	1977	20.255	-37.461	30.072	1.00	21.00
ATOM	13285	CD2	LEU	1977	21.419	-39.379	28.955	1.00	23.10
ATOM	13286	C	LEU	1977	24.476	-37.130	27.588	1.00	11.33
ATOM	13287	O	LEU	1977	25.024	-36.050	27.414	1.00	12.24
ATOM	13288	N	LEU	1978	24.253	-38.004	26.614	1.00	11.93
ATOM	13289	CA	LEU	1978	24.673	-37.739	25.247	1.00	12.10
ATOM	13290	CB	LEU	1978	26.066	-38.341	25.001	1.00	13.29
ATOM	13291	CG	LEU	1978	26.488	-38.431	23.533	1.00	16.13
ATOM	13292	CD1	LEU	1978	26.589	-37.031	22.943	1.00	16.64
ATOM	13293	CD2	LEU	1978	27.819	-39.159	23.422	1.00	12.84
ATOM	13294	C	LEU	1978	23.688	-38.311	24.238	1.00	12.27
ATOM	13295	O	LEU	1978	23.223	-39.445	24.374	1.00	13.09
ATOM	13296	N	VAL	1979	23.356	-37.503	23.239	1.00	11.61
ATOM	13297	CA	VAL	1979	22.456	-37.911	22.159	1.00	10.55
ATOM	13298	CB	VAL	1979	21.370	-36.815	21.854	1.00	10.14
ATOM	13299	CG1	VAL	1979	20.708	-37.068	20.492	1.00	10.01
ATOM	13300	CG2	VAL	1979	20.321	-36.812	22.935	1.00	9.21
ATOM	13301	C	VAL	1979	23.333	-38.099	20.926	1.00	12.11
ATOM	13302	O	VAL	1979	24.206	-37.274	20.637	1.00	13.15
ATOM	13303	N	LEU	1980	23.119	-39.216	20.238	1.00	12.53
ATOM	13304	CA	LEU	1980	23.829	-39.547	19.009	1.00	14.61
ATOM	13305	CB	LEU	1980	24.510	-40.913	19.103	1.00	16.21
ATOM	13306	CG	LEU	1980	25.859	-41.049	19.799	1.00	21.32
ATOM	13307	CD1	LEU	1980	26.338	-42.498	19.648	1.00	17.71
ATOM	13308	CD2	LEU	1980	26.877	-40.094	19.170	1.00	18.47
ATOM	13309	C	LEU	1980	22.747	-39.616	17.946	1.00	15.13
ATOM	13310	O	LEU	1980	21.812	-40.411	18.060	1.00	12.67
ATOM	13311	N	GLU	1981	22.880	-38.786	16.916	1.00	14.35
ATOM	13312	CA	GLU	1981	21.897	-38.726	15.851	1.00	17.03
ATOM	13313	CB	GLU	1981	21.298	-37.314	15.799	1.00	15.90
ATOM	13314	CG	GLU	1981	20.445	-37.013	14.584	1.00	20.75
ATOM	13315	CD	GLU	1981	19.621	-35.740	14.747	1.00	23.90
ATOM	13316	OE1	GLU	1981	20.106	-34.784	15.389	1.00	25.09
ATOM	13317	OE2	GLU	1981	18.492	-35.692	14.221	1.00	26.95
ATOM	13318	C	GLU	1981	22.424	-39.120	14.479	1.00	17.13
ATOM	13319	O	GLU	1981	23.429	-38.590	14.007	1.00	18.47
ATOM	13320	N	CYS	1982	21.733	-40.065	13.849	1.00	17.94
ATOM	13321	CA	CYS	1982	22.080	-40.532	12.513	1.00	19.05
ATOM	13322	CB	CYS	1982	21.599	-39.505	11.489	1.00	18.86
ATOM	13323	SG	CYS	1982	19.782	-39.350	11.492	1.00	25.27
ATOM	13324	C	CYS	1982	23.554	-40.847	12.313	1.00	20.26
ATOM	13325	O	CYS	1982	24.276	-40.134	11.616	1.00	21.64
ATOM	13326	N	VAL	1983	23.980	-41.947	12.920	1.00	21.57
ATOM	13327	CA	VAL	1983	25.359	-42.399	12.844	1.00	22.20
ATOM	13328	CB	VAL	1983	26.087	-42.075	14.172	1.00	23.68
ATOM	13329	CG1	VAL	1983	25.549	-42.952	15.287	1.00	24.53
ATOM	13330	CG2	VAL	1983	27.573	-42.253	14.021	1.00	26.35
ATOM	13331	C	VAL	1983	25.351	-43.913	12.614	1.00	21.11
ATOM	13332	O	VAL	1983	24.415	-44.605	13.011	1.00	19.74
ATOM	13333	N	PRO	1984	26.382	-44.450	11.945	1.00	21.78
ATOM	13334	CD	PRO	1984	27.550	-43.820	11.312	1.00	23.46
ATOM	13335	CA	PRO	1984	26.390	-45.898	11.724	1.00	20.82
ATOM	13336	CB	PRO	1984	27.718	-46.130	10.992	1.00	23.68
ATOM	13337	CG	PRO	1984	28.555	-44.935	11.367	1.00	24.78
ATOM	13338	C	PRO	1984	26.296	-46.663	13.043	1.00	18.82
ATOM	13339	O	PRO	1984	26.897	-46.268	14.040	1.00	18.80
ATOM	13340	N	VAL	1985	25.536	-47.753	13.038	1.00	18.79
ATOM	13341	CA	VAL	1985	25.336	-48.578	14.225	1.00	19.02
ATOM	13342	CB	VAL	1985	24.558	-49.873	13.874	1.00	20.60
ATOM	13343	CG1	VAL	1985	24.312	-50.691	15.122	1.00	20.17
ATOM	13344	CG2	VAL	1985	23.236	-49.524	13.214	1.00	17.11
ATOM	13345	C	VAL	1985	26.634	-48.980	14.909	1.00	20.44
ATOM	13346	O	VAL	1985	26.732	-48.931	16.136	1.00	19.37
ATOM	13347	N	GLU	1986	27.630	-49.383	14.122	1.00	20.52
ATOM	13348	CA	GLU	1986	28.907	-49.800	14.692	1.00	21.16
ATOM	13349	CB	GLU	1986	29.858	-50.322	13.605	1.00	23.66

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ATOM   13350  CG   GLU  1986      29.427 -50.073  12.168  1.00 30.18
ATOM   13351  CD   GLU  1986      28.118 -50.765  11.822  1.00 31.01
ATOM   13352  OE1  GLU  1986      27.968 -51.957  12.162  1.00 34.03
ATOM   13353  OE2  GLU  1986      27.251 -50.116  11.207  1.00 32.54
ATOM   13354  C    GLU  1986      29.578 -48.667  15.458  1.00 19.79
ATOM   13355  O    GLU  1986      30.215 -48.904  16.486  1.00 20.21
ATOM   13356  N    LEU  1987      29.435 -47.440  14.959  1.00 19.82
ATOM   13357  CA   LEU  1987      30.032 -46.288  15.629  1.00 19.57
ATOM   13358  CB   LEU  1987      29.973 -45.039  14.743  1.00 21.80
ATOM   13359  CG   LEU  1987      31.137 -44.044  14.841  1.00 24.62
ATOM   13360  CD1  LEU  1987      30.711 -42.719  14.230  1.00 24.77
ATOM   13361  CD2  LEU  1987      31.567 -43.849  16.275  1.00 27.37
ATOM   13362  C    LEU  1987      29.278 -46.015  16.930  1.00 19.16
ATOM   13363  O    LEU  1987      29.883 -45.704  17.957  1.00 19.07
ATOM   13364  N    ALA  1988      27.954 -46.129  16.879  1.00 17.69
ATOM   13365  CA   ALA  1988      27.123 -45.908  18.056  1.00 16.77
ATOM   13366  CB   ALA  1988      25.645 -46.063  17.695  1.00 18.29
ATOM   13367  C    ALA  1988      27.510 -46.919  19.131  1.00 17.28
ATOM   13368  O    ALA  1988      27.506 -46.608  20.329  1.00 15.24
ATOM   13369  N    LYS  1989      27.846 -48.130  18.692  1.00 18.47
ATOM   13370  CA   LYS  1989      28.263 -49.203  19.598  1.00 20.98
ATOM   13371  CB   LYS  1989      28.561 -50.493  18.821  1.00 25.15
ATOM   13372  CG   LYS  1989      27.483 -50.977  17.875  1.00 30.44
ATOM   13373  CD   LYS  1989      27.979 -52.169  17.038  1.00 33.35
ATOM   13374  CE   LYS  1989      26.964 -52.561  15.968  1.00 34.91
ATOM   13375  NZ   LYS  1989      27.496 -53.556  15.000  1.00 37.47
ATOM   13376  C    LYS  1989      29.551 -48.784  20.300  1.00 19.44
ATOM   13377  O    LYS  1989      29.656 -48.853  21.523  1.00 20.34
ATOM   13378  N    ARG  1990      30.530 -48.361  19.503  1.00 18.82
ATOM   13379  CA   ARG  1990      31.833 -47.951  20.017  1.00 18.71
ATOM   13380  CB   ARG  1990      32.735 -47.459  18.872  1.00 23.33
ATOM   13381  CG   ARG  1990      34.237 -47.609  19.159  1.00 28.11
ATOM   13382  CD   ARG  1990      35.120 -46.751  18.249  1.00 31.00
ATOM   13383  NE   ARG  1990      34.739 -46.823  16.841  1.00 33.95
ATOM   13384  CZ   ARG  1990      35.335 -46.132  15.871  1.00 34.97
ATOM   13385  NH1  ARG  1990      36.345 -45.320  16.155  1.00 34.80
ATOM   13386  NH2  ARG  1990      34.910 -46.239  14.619  1.00 35.67
ATOM   13387  C    ARG  1990      31.691 -46.848  21.058  1.00 17.38
ATOM   13388  O    ARG  1990      32.299 -46.901  22.125  1.00 16.41
ATOM   13389  N    ILE  1991      30.878 -45.847  20.744  1.00 15.72
ATOM   13390  CA   ILE  1991      30.660 -44.718  21.647  1.00 14.45
ATOM   13391  CB   ILE  1991      29.908 -43.586  20.897  1.00 13.43
ATOM   13392  CG2  ILE  1991      29.506 -42.468  21.887  1.00 15.10
ATOM   13393  CG1  ILE  1991      30.797 -43.074  19.767  1.00 13.76
ATOM   13394  CD1  ILE  1991      30.233 -41.892  18.986  1.00 15.99
ATOM   13395  C    ILE  1991      29.916 -45.087  22.933  1.00 13.45
ATOM   13396  O    ILE  1991      30.302 -44.674  24.029  1.00 14.39
ATOM   13397  N    THR  1992      28.856 -45.877  22.799  1.00 13.96
ATOM   13398  CA   THR  1992      28.083 -46.288  23.964  1.00 13.15
ATOM   13399  CB   THR  1992      26.814 -47.044  23.547  1.00 13.12
ATOM   13400  OG1  THR  1992      26.016 -46.196  22.708  1.00 13.87
ATOM   13401  CG2  THR  1992      25.991 -47.432  24.779  1.00 12.06
ATOM   13402  C    THR  1992      28.897 -47.153  24.922  1.00 16.80
ATOM   13403  O    THR  1992      28.761 -47.043  26.142  1.00 15.55
ATOM   13404  N    GLU  1993      29.755 -48.007  24.375  1.00 18.05
ATOM   13405  CA   GLU  1993      30.576 -48.869  25.219  1.00 19.12
ATOM   13406  CB   GLU  1993      31.088 -50.069  24.413  1.00 21.19
ATOM   13407  CG   GLU  1993      29.992 -50.833  23.681  1.00 26.97
ATOM   13408  CD   GLU  1993      30.495 -52.105  23.018  1.00 29.74
ATOM   13409  OE1  GLU  1993      31.684 -52.156  22.646  1.00 32.85
ATOM   13410  OE2  GLU  1993      29.695 -53.050  22.856  1.00 31.62
ATOM   13411  C    GLU  1993      31.761 -48.077  25.783  1.00 19.25
ATOM   13412  O    GLU  1993      32.323 -48.440  26.814  1.00 20.28
ATOM   13413  N    ALA  1994      32.130 -46.989  25.115  1.00 17.41
ATOM   13414  CA   ALA  1994      33.252 -46.178  25.564  1.00 18.10
ATOM   13415  CB   ALA  1994      33.820 -45.383  24.398  1.00 18.09
ATOM   13416  C    ALA  1994      32.888 -45.234  26.703  1.00 18.12
ATOM   13417  O    ALA  1994      33.716 -44.928  27.565  1.00 19.20
ATOM   13418  N    LEU  1995      31.645 -44.770  26.708  1.00 17.31
ATOM   13419  CA   LEU  1995      31.192 -43.841  27.741  1.00 17.19
ATOM   13420  CB   LEU  1995      30.222 -42.821  27.145  1.00 17.68
ATOM   13421  CG   LEU  1995      30.754 -41.776  26.173  1.00 18.73
ATOM   13422  CD1  LEU  1995      29.641 -40.764  25.924  1.00 12.73
ATOM   13423  CD2  LEU  1995      31.976 -41.083  26.718  1.00 24.11
ATOM   13424  C    LEU  1995      30.514 -44.507  28.924  1.00 15.56
ATOM   13425  O    LEU  1995      29.807 -45.496  28.766  1.00 17.28
ATOM   13426  N    ALA  1996      30.739 -43.942  30.106  1.00 15.73
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ATOM	13427	CA	ALA	1996	30.128	-44.435	31.324	1.00	15.27
ATOM	13428	CB	ALA	1996	30.946	-44.020	32.541	1.00	15.65
ATOM	13429	C	ALA	1996	28.727	-43.836	31.402	1.00	14.70
ATOM	13430	O	ALA	1996	27.795	-44.485	31.871	1.00	14.43
ATOM	13431	N	ILE	1997	28.575	-42.595	30.934	1.00	14.99
ATOM	13432	CA	ILE	1997	27.266	-41.939	30.946	1.00	13.59
ATOM	13433	CB	ILE	1997	27.372	-40.419	30.633	1.00	13.71
ATOM	13434	CG2	ILE	1997	28.184	-39.710	31.721	1.00	10.02
ATOM	13435	CG1	ILE	1997	27.993	-40.211	29.249	1.00	11.88
ATOM	13436	CD1	ILE	1997	28.068	-38.736	28.834	1.00	13.96
ATOM	13437	C	ILE	1997	26.337	-42.565	29.909	1.00	12.60
ATOM	13438	O	ILE	1997	26.786	-43.173	28.935	1.00	12.53
ATOM	13439	N	PRO	1998	25.018	-42.431	30.111	1.00	13.25
ATOM	13440	CD	PRO	1998	24.297	-41.930	31.296	1.00	10.70
ATOM	13441	CA.	PRO	1998	24.106	-43.019	29.128	1.00	12.65
ATOM	13442	CB	PRO	1998	22.745	-42.952	29.824	1.00	13.84
ATOM	13443	CG	PRO	1998	22.895	-41.813	30.788	1.00	18.97
ATOM	13444	C	PRO	1998	24.117	-42.292	27.784	1.00	12.72
ATOM	13445	O	PRO	1998	24.340	-41.081	27.718	1.00	12.80
ATOM	13446	N	VAL	1999	23.890	-43.053	26.721	1.00	11.68
ATOM	13447	CA	VAL	1999	23.850	-42.507	25.376	1.00	13.14
ATOM	13448	CB	VAL	1999	24.972	-43.123	24.507	1.00	14.39
ATOM	13449	CG1	VAL	1999	24.829	-42.664	23.061	1.00	13.88
ATOM	13450	CG2	VAL	1999	26.338	-42.685	25.062	1.00	13.61
ATOM	13451	C	VAL	1999	22.483	-42.815	24.784	1.00	12.68
ATOM	13452	O	VAL	1999	22.064	-43.969	24.753	1.00	11.67
ATOM	13453	N	ILE	2000	21.788	-41.768	24.346	1.00	12.00
ATOM	13454	CA	ILE	2000	20.449	-41.870	23.772	1.00	10.42
ATOM	13455	CB	ILE	2000	19.527	-40.764	24.362	1.00	11.32
ATOM	13456	CG2	ILE	2000	18.190	-40.765	23.645	1.00	14.54
ATOM	13457	CG1	ILE	2000	19.350	-40.977	25.869	1.00	12.67
ATOM	13458	CD1	ILE	2000	18.671	-39.808	26.580	1.00	14.64
ATOM	13459	C	ILE	2000	20.562	-41.667	22.265	1.00	11.37
ATOM	13460	O	ILE	2000	21.140	-40.682	21.814	1.00	12.18
ATOM	13461	N	GLY	2001	20.021	-42.595	21.486	1.00	9.93
ATOM	13462	CA	GLY	2001	20.124	-42.462	20.048	1.00	10.42
ATOM	13463	C	GLY	2001	18.845	-42.223	19.274	1.00	10.95
ATOM	13464	O	GLY	2001	17.735	-42.486	19.742	1.00	10.35
ATOM	13465	N	ILE	2002	19.024	-41.667	18.085	1.00	12.38
ATOM	13466	CA	ILE	2002	17.945	-41.430	17.149	1.00	12.82
ATOM	13467	CB	ILE	2002	17.347	-39.975	17.254	1.00	15.11
ATOM	13468	CG2	ILE	2002	18.439	-38.929	17.272	1.00	17.13
ATOM	13469	CG1	ILE	2002	16.384	-39.726	16.101	1.00	16.48
ATOM	13470	CD1	ILE	2002	15.206	-40.620	16.103	1.00	21.78
ATOM	13471	C	ILE	2002	18.652	-41.700	15.832	1.00	14.25
ATOM	13472	O	ILE	2002	19.612	-41.019	15.465	1.00	14.32
ATOM	13473	N	GLY	2003	18.202	-42.745	15.145	1.00	13.78
ATOM	13474	CA	GLY	2003	18.839	-43.124	13.902	1.00	13.18
ATOM	13475	C	GLY	2003	20.243	-43.651	14.160	1.00	13.92
ATOM	13476	O	GLY	2003	21.108	-43.548	13.293	1.00	16.63
ATOM	13477	N	ALA	2004	20.485	-44.208	15.347	1.00	14.85
ATOM	13478	CA	ALA	2004	21.803	-44.758	15.677	1.00	15.30
ATOM	13479	CB	ALA	2004	22.427	-43.972	16.832	1.00	16.97
ATOM	13480	C	ALA	2004	21.732	-46.247	16.031	1.00	15.54
ATOM	13481	O	ALA	2004	22.688	-46.814	16.565	1.00	18.51
ATOM	13482	N	GLY	2005	20.598	-46.880	15.741	1.00	16.16
ATOM	13483	CA	GLY	2005	20.448	-48.302	16.033	1.00	14.60
ATOM	13484	C	GLY	2005	20.079	-48.614	17.473	1.00	15.86
ATOM	13485	O	GLY	2005	20.022	-47.717	18.311	1.00	16.19
ATOM	13486	N	ASN	2006	19.843	-49.891	17.773	1.00	14.74
ATOM	13487	CA	ASN	2006	19.454	-50.290	19.130	1.00	14.82
ATOM	13488	CB	ASN	2006	18.552	-51.530	19.083	1.00	14.04
ATOM	13489	CG	ASN	2006	19.300	-52.803	18.712	1.00	12.52
ATOM	13490	OD1	ASN	2006	18.768	-53.901	18.870	1.00	16.70
ATOM	13491	ND2	ASN	2006	20.521	-52.668	18.222	1.00	12.06
ATOM	13492	C	ASN	2006	20.610	-50.548	20.094	1.00	14.16
ATOM	13493	O	ASN	2006	20.403	-51.082	21.183	1.00	15.13
ATOM	13494	N	VAL	2007	21.817	-50.153	19.703	1.00	14.84
ATOM	13495	CA	VAL	2007	23.002	-50.358	20.534	1.00	16.00
ATOM	13496	CB	VAL	2007	24.277	-50.349	19.677	1.00	18.48
ATOM	13497	CG1	VAL	2007	25.448	-50.869	20.490	1.00	25.46
ATOM	13498	CG2	VAL	2007	24.073	-51.178	18.421	1.00	22.41
ATOM	13499	C	VAL	2007	23.167	-49.310	21.639	1.00	16.08
ATOM	13500	O	VAL	2007	23.970	-49.486	22.557	1.00	14.39
ATOM	13501	N	THR	2008	22.418	-48.215	21.549	1.00	13.91
ATOM	13502	CA	THR	2008	22.509	-47.158	22.557	1.00	13.64
ATOM	13503	CB	THR	2008	21.997	-45.809	21.980	1.00	12.91

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ATOM   13504  OG1 THR  2008      20.692 -45.980  21.412  1.00 13.88
ATOM   13505  CG2 THR  2008      22.941 -45.303  20.901  1.00 14.51
ATOM   13506  C   THR  2008      21.743 -47.523  23.839  1.00 13.63
ATOM   13507  O   THR  2008      20.956 -48.470  23.847  1.00 15.42
ATOM   13508  N   ASP  2009      21.993 -46.796  24.925  1.00 13.00
ATOM   13509  CA  ASP  2009      21.329 -47.071  26.205  1.00 12.92
ATOM   13510  CB  ASP  2009      22.064 -46.350  27.337  1.00 13.27
ATOM   13511  CG  ASP  2009      23.552 -46.681  27.365  1.00 14.17
ATOM   13512  OD1 ASP  2009      23.898 -47.849  27.650  1.00 15.47
ATOM   13513  OD2 ASP  2009      24.362 -45.779  27.093  1.00 14.16
ATOM   13514  C   ASP  2009      19.859 -46.652  26.208  1.00 13.92
ATOM   13515  O   ASP  2009      19.035 -47.205  26.943  1.00 14.59
ATOM   13516  N   GLY  2010      19.542 -45.658  25.387  1.00 14.50
ATOM   13517  CA  GLY  2010      18.173 -45.181  25.300  1.00 13.29
ATOM   13518  C   GLY  2010      17.829 -44.764  23.878  1.00 11.32
ATOM   13519  O   GLY  2010      18.700 -44.728  23.008  1.00 11.26
ATOM   13520  N   GLN  2011      16.562 -44.437  23.644  1.00 11.11
ATOM   13521  CA  GLN  2011      16.095 -44.032  22.325  1.00 10.95
ATOM   13522  CB  GLN  2011      15.215 -45.121  21.706  1.00 12.17
ATOM   13523  CG  GLN  2011      15.926 -46.426  21.378  1.00 10.38
ATOM   13524  CD  GLN  2011      16.987 -46.262  20.303  1.00  9.79
ATOM   13525  OE1 GLN  2011      16.812 -45.508  19.344  1.00 12.91
ATOM   13526  NE2 GLN  2011      18.086 -46.986  20.445  1.00 12.26
ATOM   13527  C   GLN  2011      15.254 -42.775  22.417  1.00 11.93
ATOM   13528  O   GLN  2011      14.646 -42.495  23.451  1.00  9.84
ATOM   13529  N   ILE  2012      15.208 -42.023  21.327  1.00 13.12
ATOM   13530  CA  ILE  2012      14.384 -40.835  21.307  1.00 16.32
ATOM   13531  CB  ILE  2012      15.228 -39.563  21.592  1.00 20.21
ATOM   13532  CG2 ILE  2012      16.164 -39.278  20.451  1.00 19.95
ATOM   13533  CG1 ILE  2012      14.302 -38.372  21.851  1.00 22.75
ATOM   13534  CD1 ILE  2012      14.955 -37.275  22.672  1.00 20.84
ATOM   13535  C   ILE  2012      13.700 -40.764  19.951  1.00 18.75
ATOM   13536  O   ILE  2012      14.243 -41.208  18.939  1.00 17.43
ATOM   13537  N   LEU  2013      12.479 -40.250  19.942  1.00 19.42
ATOM   13538  CA  LEU  2013      11.746 -40.110  18.700  1.00 23.65
ATOM   13539  CB  LEU  2013      10.914 -41.356  18.419  1.00 26.87
ATOM   13540  CG  LEU  2013      11.228 -42.102  17.114  1.00 28.56
ATOM   13541  CD1 LEU  2013      10.179 -43.189  16.952  1.00 27.78
ATOM   13542  CD2 LEU  2013      11.206 -41.148  15.900  1.00 28.97
ATOM   13543  C   LEU  2013      10.835 -38.903  18.751  1.00 24.10
ATOM   13544  O   LEU  2013      10.387 -38.489  19.830  1.00 19.94
ATOM   13545  N   VAL  2014      10.588 -38.337  17.573  1.00 23.42
ATOM   13546  CA  VAL  2014       9.714 -37.186  17.420  1.00 22.95
ATOM   13547  CB  VAL  2014       9.892 -36.500  16.039  1.00 25.08
ATOM   13548  CG1 VAL  2014       8.905 -35.340  15.907  1.00 25.84
ATOM   13549  CG2 VAL  2014      11.312 -35.989  15.898  1.00 29.40
ATOM   13550  C   VAL  2014       8.310 -37.732  17.499  1.00 19.50
ATOM   13551  O   VAL  2014       7.917 -38.578  16.688  1.00 17.37
ATOM   13552  N   MET  2015       7.563 -37.258  18.488  1.00 16.88
ATOM   13553  CA  MET  2015       6.199 -37.712  18.687  1.00 15.75
ATOM   13554  CB  MET  2015       5.567 -37.024  19.913  1.00 13.34
ATOM   13555  CG  MET  2015       5.461 -35.519  19.841  1.00 14.95
ATOM   13556  SD  MET  2015       3.933 -34.982  20.657  1.00 14.22
ATOM   13557  CE  MET  2015       2.778 -35.272  19.370  1.00 13.27
ATOM   13558  C   MET  2015       5.340 -37.485  17.451  1.00 15.30
ATOM   13559  O   MET  2015       4.460 -38.288  17.150  1.00 16.99
ATOM   13560  N   HIS  2016       5.602 -36.411  16.714  1.00 12.72
ATOM   13561  CA  HIS  2016       4.804 -36.144  15.527  1.00 15.08
ATOM   13562  CB  HIS  2016       5.115 -34.739  15.005  1.00 15.69
ATOM   13563  CG  HIS  2016       4.605 -33.664  15.915  1.00 14.26
ATOM   13564  CD2 HIS  2016       5.132 -33.129  17.043  1.00 11.38
ATOM   13565  ND1 HIS  2016       3.330 -33.146  15.808  1.00 15.21
ATOM   13566  CE1 HIS  2016       3.092 -32.345  16.833  1.00 13.82
ATOM   13567  NE2 HIS  2016       4.170 -32.318  17.598  1.00 16.57
ATOM   13568  C   HIS  2016       4.989 -37.221  14.462  1.00 16.85
ATOM   13569  O   HIS  2016       4.085 -37.462  13.658  1.00 17.99
ATOM   13570  N   ASP  2017       6.143 -37.883  14.455  1.00 17.44
ATOM   13571  CA  ASP  2017       6.359 -38.967  13.495  1.00 22.03
ATOM   13572  CB  ASP  2017       7.850 -39.142  13.177  1.00 23.41
ATOM   13573  CG  ASP  2017       8.440 -37.954  12.431  1.00 27.95
ATOM   13574  OD1 ASP  2017       7.857 -37.548  11.409  1.00 27.29
ATOM   13575  OD2 ASP  2017       9.488 -37.442  12.873  1.00 26.63
ATOM   13576  C   ASP  2017       5.817 -40.278  14.079  1.00 21.90
ATOM   13577  O   ASP  2017       5.254 -41.105  13.357  1.00 23.38
ATOM   13578  N   ALA  2018       5.986 -40.454  15.388  1.00 22.26
ATOM   13579  CA  ALA  2018       5.538 -41.661  16.083  1.00 22.32
ATOM   13580  CB  ALA  2018       5.940 -41.585  17.559  1.00 23.61
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ATOM   13583  N   PHE  2019      3.255 -40.871  15.711  1.00 21.91
ATOM   13584  CA  PHE  2019      1.807 -41.011  15.561  1.00 22.15
ATOM   13585  CB  PHE  2019      1.080 -40.151  16.596  1.00 23.71
ATOM   13586  CG  PHE  2019      1.580 -40.355  17.999  1.00 24.13
ATOM   13587  CD1 PHE  2019      1.717 -41.638  18.516  1.00 24.21
ATOM   13588  CD2 PHE  2019      1.935 -39.271  18.795  1.00 25.21
ATOM   13589  CE1 PHE  2019      2.207 -41.843  19.807  1.00 25.08
ATOM   13590  CE2 PHE  2019      2.426 -39.463  20.091  1.00 25.89
ATOM   13591  CZ  PHE  2019      2.561 -40.752  20.593  1.00 26.24
ATOM   13592  C   PHE  2019      1.329 -40.637  14.155  1.00 21.96
ATOM   13593  O   PHE  2019      0.156 -40.325  13.947  1.00 22.51
ATOM   13594  N   GLY  2020      2.243 -40.658  13.194  1.00 23.05
ATOM   13595  CA  GLY  2020      1.879 -40.328  11.829  1.00 24.29
ATOM   13596  C   GLY  2020      1.192 -38.985  11.660  1.00 23.30
ATOM   13597  O   GLY  2020      0.433 -38.791  10.706  1.00 24.31
ATOM   13598  N   ILE  2021      1.445 -38.049  12.570  1.00 22.12
ATOM   13599  CA  ILE  2021      0.822 -36.731  12.466  1.00 19.93
ATOM   13600  CB  ILE  2021      0.976 -35.919  13.792  1.00 18.55
ATOM   13601  CG2 ILE  2021      0.483 -34.500  13.595  1.00 18.65
ATOM   13602  CG1 ILE  2021      0.168 -36.590  14.912  1.00 17.73
ATOM   13603  CD1 ILE  2021      0.485 -36.084  16.319  1.00 15.80
ATOM   13604  C   ILE  2021      1.447 -35.961  11.300  1.00 20.77
ATOM   13605  O   ILE  2021      0.738 -35.348  10.502  1.00 18.99
ATOM   13606  N   THR  2022      2.771 -36.008  11.194  1.00 22.40
ATOM   13607  CA  THR  2022      3.473 -35.313  10.120  1.00 25.87
ATOM   13608  CB  THR  2022      4.985 -35.269  10.385  1.00 27.00
ATOM   13609  OG1 THR  2022      5.517 -36.600  10.373  1.00 32.73
ATOM   13610  CG2 THR  2022      5.262 -34.641  11.735  1.00 26.74
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ATOM   13613  N   GLY  2023      3.078 -35.147   7.738  1.00 29.75
ATOM   13614  CA  GLY  2023      2.854 -35.620   6.381  1.00 36.68
ATOM   13615  C   GLY  2023      2.624 -37.111   6.213  1.00 40.05
ATOM   13616  O   GLY  2023      1.665 -37.666   6.754  1.00 41.97
ATOM   13617  N   GLY  2024      3.503 -37.765   5.458  1.00 41.61
ATOM   13618  CA  GLY  2024      3.364 -39.194   5.240  1.00 43.00
ATOM   13619  C   GLY  2024      4.675 -39.899   4.961  1.00 43.33
ATOM   13620  O   GLY  2024      4.750 -41.125   5.012  1.00 44.64
ATOM   13621  N   HIS  2025      5.712 -39.125   4.664  1.00 42.93
ATOM   13622  CA  HIS  2025      7.031 -39.680   4.374  1.00 42.66
ATOM   13623  CB  HIS  2025      7.622 -38.976   3.151  1.00 46.48
ATOM   13624  CG  HIS  2025      7.432 -37.489   3.161  1.00 50.68
ATOM   13625  CD2 HIS  2025      6.729 -36.676   2.337  1.00 52.17
ATOM   13626  ND1 HIS  2025      8.001 -36.669   4.112  1.00 52.20
ATOM   13627  CE1 HIS  2025      7.660 -35.415   3.872  1.00 52.74
ATOM   13628  NE2 HIS  2025      6.888 -35.392   2.801  1.00 53.69
ATOM   13629  C   HIS  2025      7.983 -39.548   5.563  1.00 39.08
ATOM   13630  O   HIS  2025      8.882 -38.709   5.552  1.00 38.93
ATOM   13631  N   ILE  2026      7.790 -40.381   6.582  1.00 35.71
ATOM   13632  CA  ILE  2026      8.638 -40.330   7.771  1.00 32.13
ATOM   13633  CB  ILE  2026      8.040 -41.148   8.927  1.00 33.92
ATOM   13634  CG2 ILE  2026      6.670 -40.599   9.305  1.00 35.60
ATOM   13635  CG1 ILE  2026      7.952 -42.620   8.522  1.00 33.22
ATOM   13636  CD1 ILE  2026      7.704 -43.554   9.685  1.00 34.59
ATOM   13637  C   ILE  2026     10.045 -40.857   7.509  1.00 27.67
ATOM   13638  O   ILE  2026     10.252 -41.720   6.652  1.00 27.84
ATOM   13639  N   PRO  2027     11.035 -40.346   8.256  1.00 25.23
ATOM   13640  CD  PRO  2027     10.945 -39.349   9.333  1.00 23.72
ATOM   13641  CA  PRO  2027     12.417 -40.793   8.075  1.00 23.00
ATOM   13642  CB  PRO  2027     13.189 -39.972   9.111  1.00 24.44
ATOM   13643  CG  PRO  2027     12.159 -39.676  10.159  1.00 26.02
ATOM   13644  C   PRO  2027     12.596 -42.299   8.266  1.00 21.46
ATOM   13645  O   PRO  2027     11.814 -42.950   8.964  1.00 18.01
ATOM   13646  N   LYS  2028     13.638 -42.840   7.642  1.00 21.15
ATOM   13647  CA  LYS  2028     13.928 -44.266   7.722  1.00 22.87
ATOM   13648  CB  LYS  2028     15.189 -44.607   6.914  1.00 25.69
ATOM   13649  CG  LYS  2028     14.946 -44.928   5.441  1.00 33.29
ATOM   13650  CD  LYS  2028     14.455 -43.717   4.653  1.00 36.85
ATOM   13651  CE  LYS  2028     14.326 -44.047   3.170  1.00 40.01
ATOM   13652  NZ  LYS  2028     14.001 -42.848   2.343  1.00 41.13
ATOM   13653  C   LYS  2028     14.109 -44.767   9.146  1.00 20.12
ATOM   13654  O   LYS  2028     13.751 -45.901   9.448  1.00 19.79
ATOM   13655  N   PHE  2029     14.656 -43.926  10.020  1.00 18.98
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ATOM   13657  CB  PHE  2029     16.031 -43.494  11.994  1.00 16.61
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ATOM  13658  CG  PHE  2029    15.756 -42.027  11.973  1.00 18.88
ATOM  13659  CD1 PHE  2029    14.872 -41.459  12.882  1.00 18.51
ATOM  13660  CD2 PHE  2029    16.353 -41.211  11.014  1.00 18.71
ATOM  13661  CE1 PHE  2029    14.585 -40.097  12.842  1.00 19.42
ATOM  13662  CE2 PHE  2029    16.072 -39.846  10.961  1.00 19.33
ATOM  13663  CZ  PHE  2029    15.187 -39.288  11.875  1.00 19.51
ATOM  13664  C   PHE  2029    13.683 -44.279  12.313  1.00 14.56
ATOM  13665  O   PHE  2029    13.732 -44.765  13.435  1.00 12.75
ATOM  13666  N   ALA  2030    12.587 -43.706  11.822  1.00 13.77
ATOM  13667  CA  ALA  2030    11.374 -43.579  12.615  1.00 13.91
ATOM  13668  CB  ALA  2030    10.752 -42.221  12.387  1.00 14.25
ATOM  13669  C   ALA  2030    10.336 -44.661  12.345  1.00 15.51
ATOM  13670  O   ALA  2030    10.415 -45.389  11.356  1.00 14.24
ATOM  13671  N   LYS  2031     9.360 -44.751  13.243  1.00 13.26
ATOM  13672  CA  LYS  2031     8.287 -45.713  13.122  1.00 13.53
ATOM  13673  CB  LYS  2031     8.599 -46.980  13.924  1.00 13.73
ATOM  13674  CG  LYS  2031     7.469 -48.008  13.894  1.00 13.98
ATOM  13675  CD  LYS  2031     7.871 -49.321  14.566  1.00 15.44
ATOM  13676  CE  LYS  2031     6.659 -50.206  14.782  1.00 17.20
ATOM  13677  NZ  LYS  2031     7.004 -51.532  15.354  1.00 18.85
ATOM  13678  C   LYS  2031     6.996 -45.096  13.625  1.00 13.24
ATOM  13679  O   LYS  2031     6.981 -44.383  14.633  1.00 12.44
ATOM  13680  N   ASN  2032     5.915 -45.359  12.900  1.00 13.87
ATOM  13681  CA  ASN  2032     4.594 -44.866  13.272  1.00 14.13
ATOM  13682  CB  ASN  2032     3.746 -44.625  12.015  1.00 15.58
ATOM  13683  CG  ASN  2032     2.318 -44.218  12.336  1.00 17.14
ATOM  13684  OD1 ASN  2032     1.846 -44.384  13.465  1.00 18.37
ATOM  13685  ND2 ASN  2032     1.614 -43.699  11.338  1.00 15.68
ATOM  13686  C   ASN  2032     3.964 -45.964  14.124  1.00 14.09
ATOM  13687  O   ASN  2032     3.512 -46.987  13.594  1.00 13.04
ATOM  13688  N   PHE  2033     3.955 -45.760  15.435  1.00 11.21
ATOM  13689  CA  PHE  2033     3.382 -46.733  16.370  1.00 13.08
ATOM  13690  CB  PHE  2033     3.967 -46.540  17.778  1.00 13.19
ATOM  13691  CG  PHE  2033     5.412 -46.946  17.888  1.00 13.28
ATOM  13692  CD1 PHE  2033     6.430 -46.051  17.569  1.00 13.02
ATOM  13693  CD2 PHE  2033     5.754 -48.254  18.240  1.00 12.37
ATOM  13694  CE1 PHE  2033     7.773 -46.446  17.587  1.00 14.04
ATOM  13695  CE2 PHE  2033     7.091 -48.663  18.262  1.00 11.80
ATOM  13696  CZ  PHE  2033     8.106 -47.756  17.934  1.00 12.01
ATOM  13697  C   PHE  2033     1.864 -46.643  16.421  1.00 14.14
ATOM  13698  O   PHE  2033     1.183 -47.603  16.788  1.00 15.64
ATOM  13699  N   LEU  2034     1.315 -45.493  16.054  1.00 13.12
ATOM  13700  CA  LEU  2034    -0.135 -45.372  16.075  1.00 14.61
ATOM  13701  CB  LEU  2034    -0.566 -43.933  15.780  1.00 15.30
ATOM  13702  CG  LEU  2034    -2.088 -43.744  15.737  1.00 15.00
ATOM  13703  CD1 LEU  2034    -2.712 -44.235  17.047  1.00 17.20
ATOM  13704  CD2 LEU  2034    -2.419 -42.283  15.484  1.00 15.32
ATOM  13705  C   LEU  2034    -0.741 -46.331  15.039  1.00 16.57
ATOM  13706  O   LEU  2034    -1.736 -47.004  15.313  1.00 14.84
ATOM  13707  N   ALA  2035    -0.132 -46.390  13.858  1.00 20.33
ATOM  13708  CA  ALA  2035    -0.603 -47.266  12.783  1.00 27.79
ATOM  13709  CB  ALA  2035     0.385 -47.238  11.614  1.00 29.37
ATOM  13710  C   ALA  2035    -0.790 -48.700  13.269  1.00 33.38
ATOM  13711  O   ALA  2035    -1.530 -49.483  12.664  1.00 36.55
ATOM  13712  N   GLU  2036    -0.117 -49.036  14.366  1.00 37.14
ATOM  13713  CA  GLU  2036    -0.194 -50.373  14.954  1.00 41.95
ATOM  13714  CB  GLU  2036     0.893 -50.541  16.026  1.00 42.91
ATOM  13715  CG  GLU  2036     2.290 -50.150  15.573  1.00 47.48
ATOM  13716  CD  GLU  2036     2.844 -51.058  14.493  1.00 49.09
ATOM  13717  OE1 GLU  2036     3.892 -50.704  13.909  1.00 50.73
ATOM  13718  OE2 GLU  2036     2.240 -52.125  14.231  1.00 51.86
ATOM  13719  C   GLU  2036    -1.561 -50.605  15.591  1.00 43.11
ATOM  13720  O   GLU  2036    -1.915 -51.740  15.916  1.00 44.60
ATOM  13721  N   THR  2037    -2.313 -49.520  15.770  1.00 43.75
ATOM  13722  CA  THR  2037    -3.647 -49.569  16.372  1.00 43.51
ATOM  13723  CB  THR  2037    -3.554 -49.742  17.894  1.00 44.86
ATOM  13724  OG1 THR  2037    -4.872 -49.832  18.452  1.00 46.90
ATOM  13725  CG2 THR  2037    -2.821 -48.567  18.513  1.00 47.17
ATOM  13726  C   THR  2037    -4.422 -48.283  16.075  1.00 41.90
ATOM  13727  O   THR  2037    -4.206 -47.644  15.046  1.00 43.72
ATOM  13728  N   GLY  2038    -5.330 -47.916  16.976  1.00 38.86
ATOM  13729  CA  GLY  2038    -6.107 -46.700  16.809  1.00 32.91
ATOM  13730  C   GLY  2038    -6.187 -45.946  18.123  1.00 29.01
ATOM  13731  O   GLY  2038    -7.129 -45.193  18.383  1.00 29.97
ATOM  13732  N   ASP  2039    -5.184 -46.157  18.964  1.00 23.77
ATOM  13733  CA  ASP  2039    -5.134 -45.510  20.271  1.00 19.97
ATOM  13734  CB  ASP  2039    -5.582 -46.503  21.353  1.00 23.10
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ATOM   13735  CG   ASP  2039     -5.458 -45.935  22.755  1.00 26.45
ATOM   13736  OD1  ASP  2039     -4.352 -45.993  23.316  1.00 25.80
ATOM   13737  OD2  ASP  2039     -6.466 -45.412  23.284  1.00 33.68
ATOM   13738  C    ASP  2039     -3.709 -45.026  20.528  1.00 15.18
ATOM   13739  O    ASP  2039     -2.770 -45.814  20.510  1.00 11.93
ATOM   13740  N    ILE  2040     -3.562 -43.725  20.762  1.00 14.13
ATOM   13741  CA   ILE  2040     -2.256 -43.121  20.989  1.00 12.51
ATOM   13742  CB   ILE  2040     -2.379 -41.579  21.053  1.00 12.90
ATOM   13743  CG2  ILE  2040     -1.046 -40.954  21.421  1.00 12.00
ATOM   13744  CG1  ILE  2040     -2.842 -41.052  19.689  1.00 13.88
ATOM   13745  CD1  ILE  2040     -3.192 -39.555  19.673  1.00 14.99
ATOM   13746  C    ILE  2040     -1.544 -43.645  22.234  1.00 12.95
ATOM   13747  O    ILE  2040     -0.336 -43.838  22.214  1.00 13.26
ATOM   13748  N    ARG  2041     -2.280 -43.881  23.312  1.00 11.80
ATOM   13749  CA   ARG  2041     -1.657 -44.390  24.520  1.00 13.04
ATOM   13750  CB   ARG  2041     -2.667 -44.389  25.660  1.00 13.92
ATOM   13751  CG   ARG  2041     -2.981 -42.985  26.125  1.00 14.21
ATOM   13752  CD   ARG  2041     -4.050 -42.968  27.178  1.00 16.52
ATOM   13753  NE   ARG  2041     -4.194 -41.629  27.733  1.00 14.95
ATOM   13754  CZ   ARG  2041     -4.651 -40.579  27.057  1.00 18.50
ATOM   13755  NH1  ARG  2041     -5.024 -40.700  25.791  1.00 14.68
ATOM   13756  NH2  ARG  2041     -4.728 -39.397  27.646  1.00 17.59
ATOM   13757  C    ARG  2041     -1.113 -45.793  24.264  1.00 12.55
ATOM   13758  O    ARG  2041     -0.026 -46.143  24.729  1.00 11.32
ATOM   13759  N    ALA  2042     -1.862 -46.598  23.515  1.00 12.58
ATOM   13760  CA   ALA  2042     -1.405 -47.946  23.186  1.00 13.09
ATOM   13761  CB   ALA  2042     -2.481 -48.698  22.387  1.00 13.73
ATOM   13762  C    ALA  2042     -0.115 -47.838  22.368  1.00 12.86
ATOM   13763  O    ALA  2042      0.823 -48.625  22.554  1.00 13.69
ATOM   13764  N    ALA  2043     -0.068 -46.862  21.462  1.00 11.53
ATOM   13765  CA   ALA  2043      1.121 -46.648  20.629  1.00 11.50
ATOM   13766  CB   ALA  2043      0.863 -45.552  19.605  1.00 10.75
ATOM   13767  C    ALA  2043      2.322 -46.277  21.491  1.00 10.66
ATOM   13768  O    ALA  2043      3.439 -46.727  21.235  1.00 12.15
ATOM   13769  N    VAL  2044      2.093 -45.449  22.505  1.00  9.56
ATOM   13770  CA   VAL  2044      3.166 -45.060  23.410  1.00  9.69
ATOM   13771  CB   VAL  2044      2.684 -43.988  24.419  1.00 11.94
ATOM   13772  CG1  VAL  2044      3.702 -43.828  25.536  1.00 11.70
ATOM   13773  CG2  VAL  2044      2.506 -42.656  23.694  1.00  9.79
ATOM   13774  C    VAL  2044      3.695 -46.278  24.163  1.00 11.89
ATOM   13775  O    VAL  2044      4.910 -46.478  24.268  1.00 11.33
ATOM   13776  N    ARG  2045      2.782 -47.101  24.672  1.00 10.73
ATOM   13777  CA   ARG  2045      3.178 -48.301  25.409  1.00 12.45
ATOM   13778  CB   ARG  2045      1.939 -49.016  25.956  1.00 11.81
ATOM   13779  CG   ARG  2045      1.325 -48.297  27.150  1.00 15.71
ATOM   13780  CD   ARG  2045      0.359 -49.185  27.908  1.00 17.80
ATOM   13781  NE   ARG  2045     -0.791 -49.608  27.115  1.00 18.46
ATOM   13782  CZ   ARG  2045     -1.866 -48.862  26.874  1.00 19.90
ATOM   13783  NH1  ARG  2045     -1.955 -47.632  27.360  1.00 18.74
ATOM   13784  NH2  ARG  2045     -2.874 -49.358  26.165  1.00 17.78
ATOM   13785  C    ARG  2045      3.986 -49.265  24.547  1.00 11.67
ATOM   13786  O    ARG  2045      4.925 -49.897  25.031  1.00 13.65
ATOM   13787  N    GLN  2046      3.604 -49.373  23.278  1.00 11.60
ATOM   13788  CA   GLN  2046      4.279 -50.255  22.343  1.00 13.89
ATOM   13789  CB   GLN  2046      3.503 -50.340  21.027  1.00 15.05
ATOM   13790  CG   GLN  2046      4.052 -51.389  20.066  1.00 17.14
ATOM   13791  CD   GLN  2046      3.320 -51.419  18.737  1.00 21.49
ATOM   13792  OE1  GLN  2046      2.098 -51.286  18.687  1.00 24.59
ATOM   13793  NE2  GLN  2046      4.063 -51.607  17.656  1.00 23.02
ATOM   13794  C    GLN  2046      5.682 -49.742  22.071  1.00 14.22
ATOM   13795  O    GLN  2046      6.624 -50.523  21.932  1.00 13.87
ATOM   13796  N    TYR  2047      5.821 -48.424  21.982  1.00 12.66
ATOM   13797  CA   TYR  2047      7.136 -47.834  21.740  1.00 13.34
ATOM   13798  CB   TYR  2047      6.993 -46.321  21.552  1.00 12.45
ATOM   13799  CG   TYR  2047      8.285 -45.548  21.643  1.00 13.33
ATOM   13800  CD1  TYR  2047      9.397 -45.883  20.855  1.00 12.66
ATOM   13801  CE1  TYR  2047     10.582 -45.148  20.940  1.00 15.89
ATOM   13802  CD2  TYR  2047      8.392 -44.469  22.510  1.00 12.07
ATOM   13803  CE2  TYR  2047      9.557 -43.735  22.601  1.00 14.07
ATOM   13804  CZ   TYR  2047     10.649 -44.068  21.824  1.00 14.94
ATOM   13805  OH   TYR  2047     11.805 -43.318  21.929  1.00 16.90
ATOM   13806  C    TYR  2047      8.030 -48.163  22.939  1.00 12.59
ATOM   13807  O    TYR  2047      9.145 -48.661  22.784  1.00 10.64
ATOM   13808  N    MET  2048      7.522 -47.896  24.139  1.00 12.77
ATOM   13809  CA   MET  2048      8.266 -48.190  25.361  1.00 13.01
ATOM   13810  CB   MET  2048      7.394 -47.907  26.595  1.00 14.40
ATOM   13811  CG   MET  2048      7.101 -46.434  26.842  1.00 14.98
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ATOM	13812	SD	MET	2048	5.856	-46.160	28.106	1.00	18.28
ATOM	13813	CE	MET	2048	6.752	-46.711	29.577	1.00	18.21
ATOM	13814	C	MET	2048	8.730	-49.647	25.400	1.00	14.55
ATOM	13815	O	MET	2048	9.907	-49.941	25.652	1.00	11.07
ATOM	13816	N	ALA	2049	7.793	-50.561	25.163	1.00	13.04
ATOM	13817	CA	ALA	2049	8.096	-51.988	25.182	1.00	14.89
ATOM	13818	CB	ALA	2049	6.798	-52.799	24.992	1.00	14.38
ATOM	13819	C	ALA	2049	9.128	-52.385	24.130	1.00	15.06
ATOM	13820	O	ALA	2049	10.043	-53.163	24.414	1.00	14.34
ATOM	13821	N	GLU	2050	9.008	-51.849	22.916	1.00	12.60
ATOM	13822	CA	GLU	2050	9.963	-52.224	21.869	1.00	13.77
ATOM	13823	CB	GLU	2050	9.461	-51.778	20.480	1.00	10.52
ATOM	13824	CG	GLU	2050	8.388	-52.697	19.915	1.00	12.90
ATOM	13825	CD	GLU	2050	7.895	-52.284	18.544	1.00	14.19
ATOM	13826	OE1	GLU	2050	8.707	-51.760	17.752	1.00	14.22
ATOM	13827	OE2	GLU	2050	6.695	-52.502	18.255	1.00	13.57
ATOM	13828	C	GLU	2050	11.361	-51.689	22.145	1.00	14.61
ATOM	13829	O	GLU	2050	12.354	-52.322	21.790	1.00	12.04
ATOM	13830	N	VAL	2051	11.453	-50.528	22.783	1.00	14.04
ATOM	13831	CA	VAL	2051	12.774	-49.999	23.088	1.00	12.24
ATOM	13832	CB	VAL	2051	12.701	-48.552	23.589	1.00	12.65
ATOM	13833	CG1	VAL	2051	14.041	-48.153	24.216	1.00	12.32
ATOM	13834	CG2	VAL	2051	12.361	-47.621	22.427	1.00	10.30
ATOM	13835	C	VAL	2051	13.434	-50.866	24.159	1.00	12.70
ATOM	13836	O	VAL	2051	14.618	-51.203	24.063	1.00	14.76
ATOM	13837	N	GLU	2052	12.666	-51.232	25.177	1.00	12.67
ATOM	13838	CA	GLU	2052	13.198	-52.051	26.267	1.00	13.06
ATOM	13839	CB	GLU	2052	12.177	-52.152	27.405	1.00	17.19
ATOM	13840	CG	GLU	2052	12.650	-52.976	28.597	1.00	22.09
ATOM	13841	CD	GLU	2052	11.791	-52.760	29.836	1.00	27.02
ATOM	13842	OE1	GLU	2052	11.779	-53.647	30.714	1.00	29.74
ATOM	13843	OE2	GLU	2052	11.135	-51.702	29.940	1.00	27.52
ATOM	13844	C	GLU	2052	13.610	-53.446	25.809	1.00	15.04
ATOM	13845	O	GLU	2052	14.600	-54.006	26.299	1.00	12.91
ATOM	13846	N	SER	2053	12.866	-54.005	24.862	1.00	14.34
ATOM	13847	CA	SER	2053	13.176	-55.336	24.349	1.00	16.44
ATOM	13848	CB	SER	2053	11.939	-55.945	23.689	1.00	17.92
ATOM	13849	OG	SER	2053	10.960	-56.242	24.665	1.00	29.42
ATOM	13850	C	SER	2053	14.306	-55.292	23.337	1.00	16.59
ATOM	13851	O	SER	2053	14.868	-56.326	22.994	1.00	16.54
ATOM	13852	N	GLY	2054	14.632	-54.096	22.856	1.00	14.35
ATOM	13853	CA	GLY	2054	15.695	-53.961	21.877	1.00	14.92
ATOM	13854	C	GLY	2054	15.168	-54.137	20.464	1.00	14.49
ATOM	13855	O	GLY	2054	15.930	-54.058	19.503	1.00	14.84
ATOM	13856	N	VAL	2055	13.862	-54.379	20.347	1.00	13.75
ATOM	13857	CA	VAL	2055	13.181	-54.582	19.061	1.00	16.33
ATOM	13858	CB	VAL	2055	11.704	-55.006	19.312	1.00	19.13
ATOM	13859	CG1	VAL	2055	10.824	-54.610	18.157	1.00	24.52
ATOM	13860	CG2	VAL	2055	11.640	-56.508	19.561	1.00	22.18
ATOM	13861	C	VAL	2055	13.203	-53.333	18.181	1.00	15.78
ATOM	13862	O	VAL	2055	13.299	-53.420	16.953	1.00	14.79
ATOM	13863	N	TYR	2056	13.077	-52.177	18.823	1.00	13.64
ATOM	13864	CA	TYR	2056	13.105	-50.895	18.121	1.00	14.23
ATOM	13865	CB	TYR	2056	11.816	-50.108	18.336	1.00	14.11
ATOM	13866	CG	TYR	2056	11.878	-48.760	17.647	1.00	13.46
ATOM	13867	CD1	TYR	2056	11.680	-48.653	16.270	1.00	14.58
ATOM	13868	CE1	TYR	2056	11.857	-47.443	15.605	1.00	13.65
ATOM	13869	CD2	TYR	2056	12.248	-47.614	18.349	1.00	11.87
ATOM	13870	CE2	TYR	2056	12.430	-46.397	17.696	1.00	13.86
ATOM	13871	CZ	TYR	2056	12.234	-46.323	16.326	1.00	14.29
ATOM	13872	OH	TYR	2056	12.432	-45.134	15.671	1.00	14.14
ATOM	13873	C	TYR	2056	14.266	-50.086	18.691	1.00	13.20
ATOM	13874	O	TYR	2056	14.412	-49.991	19.901	1.00	13.24
ATOM	13875	N	PRO	2057	15.092	-49.477	17.825	1.00	15.12
ATOM	13876	CD	PRO	2057	16.137	-48.516	18.218	1.00	16.15
ATOM	13877	CA	PRO	2057	14.952	-49.547	16.371	1.00	15.54
ATOM	13878	CB	PRO	2057	15.799	-48.374	15.880	1.00	18.49
ATOM	13879	CG	PRO	2057	16.865	-48.270	16.917	1.00	17.17
ATOM	13880	C	PRO	2057	15.378	-50.876	15.763	1.00	17.76
ATOM	13881	O	PRO	2057	16.236	-51.580	16.301	1.00	16.91
ATOM	13882	N	GLY	2058	14.745	-51.223	14.646	1.00	16.96
ATOM	13883	CA	GLY	2058	15.069	-52.457	13.951	1.00	18.25
ATOM	13884	C	GLY	2058	16.151	-52.181	12.932	1.00	19.23
ATOM	13885	O	GLY	2058	16.593	-51.039	12.776	1.00	17.91
ATOM	13886	N	GLU	2059	16.590	-53.220	12.234	1.00	18.48
ATOM	13887	CA	GLU	2059	17.627	-53.048	11.225	1.00	19.82
ATOM	13888	CB	GLU	2059	17.963	-54.396	10.572	1.00	22.37

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ATOM   13889  CG   GLU  2059      19.024 -54.287   9.491  1.00 25.19
ATOM   13890  CD   GLU  2059      20.374 -53.864  10.050  1.00 26.27
ATOM   13891  OE1  GLU  2059      21.173 -53.288   9.285  1.00 28.76
ATOM   13892  OE2  GLU  2059      20.637 -54.117  11.246  1.00 24.77
ATOM   13893  C    GLU  2059      17.193 -52.054  10.151  1.00 17.71
ATOM   13894  O    GLU  2059      18.007 -51.273   9.657  1.00 16.86
ATOM   13895  N    GLU  2060      15.909 -52.078   9.797  1.00 18.39
ATOM   13896  CA   GLU  2060      15.388 -51.179   8.764  1.00 19.58
ATOM   13897  CB   GLU  2060      13.936 -51.506   8.433  1.00 23.58
ATOM   13898  CG   GLU  2060      13.569 -52.954   8.501  1.00 29.46
ATOM   13899  CD  .GLU  2060      12.479 -53.188   9.527  1.00 30.54
ATOM   13900  OE1  GLU  2060      11.392 -52.590   9.370  1.00 31.23
ATOM   13901  OE2  GLU  2060      12.724 -53.954  10.484  1.00 34.44
ATOM   13902  C    GLU  2060      15.443 -49.723   9.197  1.00 18.24
ATOM   13903  O    GLU  2060      15.340 -48.828   8.363  1.00 18.32
ATOM   13904  N    HIS  2061      15.592 -49.495  10.499  1.00 17.85
ATOM   13905  CA   HIS  2061      15.646 -48.138  11.050  1.00 15.77
ATOM   13906  CB   HIS  2061      14.890 -48.075  12.374  1.00 15.70
ATOM   13907  CG   HIS  2061      13.485 -48.573  12.296  1.00 13.96
ATOM   13908  CD2  HIS  2061      12.870 -49.609  12.912  1.00 11.61
ATOM   13909  ND1  HIS  2061      12.526 -47.964  11.518  1.00 14.67
ATOM   13910  CE1  HIS  2061      11.378 -48.601  11.660  1.00 12.03
ATOM   13911  NE2  HIS  2061      11.559 -49.603  12.500  1.00 17.48
ATOM   13912  C    HIS  2061      17.074 -47.702  11.324  1.00 16.96
ATOM   13913  O    HIS  2061      17.292 -46.639  11.899  1.00 16.77
ATOM   13914  N    SER  2062      18.040 -48.516  10.913  1.00 17.85
ATOM   13915  CA   SER  2062      19.449 -48.230  11.175  1.00 18.95
ATOM   13916  CB   SER  2062      20.056 -49.420  11.926  1.00 18.81
ATOM   13917  OG   SER  2062      19.261 -49.760  13.059  1.00 21.12
ATOM   13918  C    SER  2062      20.298 -47.917   9.941  1.00 21.62
ATOM   13919  O    SER  2062      19.945 -48.283   8.813  1.00 21.18
ATOM   13920  N    PHE  2063      21.423 -47.240  10.170  1.00 22.99
ATOM   13921  CA   PHE  2063      22.359 -46.870   9.099  1.00 26.28
ATOM   13922  CB   PHE  2063      22.600 -45.348   9.075  1.00 26.42
ATOM   13923  CG   PHE  2063      21.360 -44.526   8.820  1.00 29.55
ATOM   13924  CD1  PHE  2063      20.806 -43.746   9.835  1.00 31.06
ATOM   13925  CD2  PHE  2063      20.754 -44.519   7.568  1.00 29.76
ATOM   13926  CE1  PHE  2063      19.663 -42.974   9.607  1.00 30.50
ATOM   13927  CE2  PHE  2063      19.610 -43.750   7.328  1.00 31.05
ATOM   13928  CZ   PHE  2063      19.065 -42.976   8.350  1.00 29.87
ATOM   13929  C    PHE  2063      23.701 -47.577   9.301  1.00 26.42
ATOM   13930  O    PHE  2063      24.107 -47.849  10.432  1.00 22.96
ATOM   13931  N    HIS  2064      24.386 -47.867   8.199  1.00 28.64
ATOM   13932  CA   HIS  2064      25.687 -48.543   8.246  1.00 31.07
ATOM   13933  CB   HIS  2064      25.543 -49.996   7.789  1.00 31.23
ATOM   13934  CG   HIS  2064      24.784 -50.855   8.749  1.00 31.06
ATOM   13935  CD2  HIS  2064      23.523 -51.345   8.704  1.00 30.91
ATOM   13936  ND1  HIS  2064      25.320 -51.287   9.943  1.00 32.43
ATOM   13937  CE1  HIS  2064      24.423 -52.007  10.593  1.00 32.22
ATOM   13938  NE2  HIS  2064      23.323 -52.058   9.863  1.00 32.35
ATOM   13939  C    HIS  2064      26.729 -47.836   7.381  1.00 31.64
ATOM   13940  O    HIS  2064      27.892 -47.757   7.818  1.00 32.53
ATOM   13941  OXT  HIS  2064      26.375 -47.385   6.272  1.00 34.83
ATOM   13942  C1   KPL  2065      15.474 -35.267  17.263  1.00 36.48
ATOM   13943  C2   KPL  2065      16.103 -34.899  18.622  1.00 35.77
ATOM   13944  C3   KPL  2065      15.239 -35.486  19.739  1.00 36.51
ATOM   13945  C4   KPL  2065      17.519 -35.515  18.719  1.00 37.71
ATOM   13946  O1   KPL  2065      18.376 -35.011  17.682  1.00 42.74
ATOM   13947  C5   KPL  2065      16.164 -33.356  18.773  1.00 32.73
ATOM   13948  O2   KPL  2065      17.230 -32.800  18.938  1.00 31.75
ATOM   13949  C6   KPL  2065      14.923 -32.498  18.721  1.00 31.70
ATOM   13950  O3   KPL  2065      13.821 -33.000  18.568  1.00 31.03
ATOM   13951  O4   KPL  2065      15.041 -31.157  18.845  1.00 20.56
ATOM   13952  CB   MET  2101      22.414  -8.383  70.247  1.00 66.53
ATOM   13953  CG   MET  2101      22.617  -8.021  71.717  1.00 69.29
ATOM   13954  SD   MET  2101      22.027  -6.373  72.186  1.00 72.42
ATOM   13955  CE   MET  2101      23.584  -5.466  72.275  1.00 72.02
ATOM   13956  C    MET  2101      22.338  -6.232  68.953  1.00 62.58
ATOM   13957  O    MET  2101      21.157  -6.314  68.610  1.00 62.34
ATOM   13958  N    MET  2101      24.527  -7.178  69.751  1.00 64.37
ATOM   13959  CA   MET  2101      23.158  -7.490  69.244  1.00 64.28
ATOM   13960  N    LYS  2102      22.975  -5.073  69.085  1.00 60.08
ATOM   13961  CA   LYS  2102      22.317  -3.798  68.834  1.00 57.36
ATOM   13962  CB   LYS  2102      22.010  -3.086  70.157  1.00 58.35
ATOM   13963  CG   LYS  2102      20.762  -3.591  70.868  1.00 60.33
ATOM   13964  CD   LYS  2102      19.496  -3.202  70.117  1.00 61.31
ATOM   13965  CE   LYS  2102      19.296  -1.693  70.111  1.00 62.35
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ATOM  13966  NZ   LYS  2102     18.073  -1.296  69.354  1.00 63.75
ATOM  13967  C    LYS  2102     23.179  -2.896  67.957  1.00 54.18
ATOM  13968  O    LYS  2102     23.678  -1.865  68.413  1.00 54.59
ATOM  13969  N    PRO  2103     23.371  -3.276  66.685  1.00 50.17
ATOM  13970  CD   PRO  2103     23.878  -2.346  65.660  1.00 49.96
ATOM  13971  CA   PRO  2103     22.830  -4.484  66.053  1.00 46.64
ATOM  13972  CB   PRO  2103     22.605  -4.032  64.620  1.00 47.38
ATOM  13973  CG   PRO  2103     23.802  -3.176  64.386  1.00 48.98
ATOM  13974  C    PRO  2103     23.794  -5.673  66.131  1.00 42.70
ATOM  13975  O    PRO  2103     24.924  -5.536  66.596  1.00 41.32
ATOM  13976  N    THR  2104     23.334  -6.832  65.667  1.00 38.31
ATOM  13977  CA   THR  2104     24.144  -8.045  65.662  1.00 35.00
ATOM  13978  CB   THR  2104     23.259  -9.309  65.701  1.00 35.04
ATOM  13979  OG1  THR  2104     22.442  -9.286  66.875  1.00 34.66
ATOM  13980  CG2  THR  2104     24.116 -10.561  65.714  1.00 34.54
ATOM  13981  C    THR  2104     24.981  -8.080  64.384  1.00 33.55
ATOM  13982  O    THR  2104     24.455  -7.872  63.291  1.00 31.34
ATOM  13983  N    THR  2105     26.279  -8.340  64.521  1.00 31.77
ATOM  13984  CA   THR  2105     27.172  -8.391  63.365  1.00 30.32
ATOM  13985  CB   THR  2105     28.127  -7.175  63.336  1.00 30.72
ATOM  13986  OG1  THR  2105     28.999  -7.223  64.471  1.00 32.36
ATOM  13987  CG2  THR  2105     27.338  -5.874  63.366  1.00 29.57
ATOM  13988  C    THR  2105     28.013  -9.664  63.355  1.00 29.36
ATOM  13989  O    THR  2105     27.945 -10.474  64.281  1.00 29.05
ATOM  13990  N    ILE  2106     28.798  -9.837  62.297  1.00 28.45
ATOM  13991  CA   ILE  2106     29.666 -11.004  62.162  1.00 28.68
ATOM  13992  CB   ILE  2106     30.529 -10.912  60.893  1.00 28.87
ATOM  13993  CG2  ILE  2106     31.287 -12.221  60.690  1.00 28.27
ATOM  13994  CG1  ILE  2106     29.639 -10.618  59.681  1.00 31.64
ATOM  13995  CD1  ILE  2106     30.409 -10.317  58.403  1.00 31.18
ATOM  13996  C    ILE  2106     30.599 -11.079  63.364  1.00 29.36
ATOM  13997  O    ILE  2106     30.944 -12.164  63.833  1.00 29.25
ATOM  13998  N    SER  2107     31.003  -9.912  63.854  1.00 29.55
ATOM  13999  CA   SER  2107     31.897  -9.820  65.002  1.00 30.81
ATOM  14000  CB   SER  2107     32.058  -8.358  65.425  1.00 31.74
ATOM  14001  OG   SER  2107     32.548  -7.568  64.361  1.00 34.72
ATOM  14002  C    SER  2107     31.363 -10.632  66.175  1.00 29.75
ATOM  14003  O    SER  2107     32.131 -11.245  66.904  1.00 29.24
ATOM  14004  N    LEU  2108     30.045 -10.630  66.348  1.00 29.42
ATOM  14005  CA   LEU  2108     29.419 -11.368  67.436  1.00 29.77
ATOM  14006  CB   LEU  2108     27.925 -11.045  67.512  1.00 30.86
ATOM  14007  CG   LEU  2108     27.356 -10.598  68.865  1.00 32.78
ATOM  14008  CD1  LEU  2108     25.830 -10.637  68.802  1.00 33.38
ATOM  14009  CD2  LEU  2108     27.851 -11.506  69.983  1.00 32.44
ATOM  14010  C    LEU  2108     29.601 -12.874  67.267  1.00 29.98
ATOM  14011  O    LEU  2108     29.949 -13.575  68.216  1.00 28.71
ATOM  14012  N    LEU  2109     29.366 -13.369  66.055  1.00 28.45
ATOM  14013  CA   LEU  2109     29.504 -14.795  65.783  1.00 28.96
ATOM  14014  CB   LEU  2109     29.031 -15.112  64.360  1.00 26.96
ATOM  14015  CG   LEU  2109     27.608 -14.653  63.997  1.00 26.16
ATOM  14016  CD1  LEU  2109     27.228 -15.201  62.628  1.00 24.61
ATOM  14017  CD2  LEU  2109     26.621 -15.140  65.046  1.00 23.92
ATOM  14018  C    LEU  2109     30.955 -15.232  65.962  1.00 30.20
ATOM  14019  O    LEU  2109     31.234 -16.329  66.455  1.00 27.70
ATOM  14020  N    GLN  2110     31.879 -14.366  65.563  1.00 32.67
ATOM  14021  CA   GLN  2110     33.299 -14.666  65.691  1.00 35.69
ATOM  14022  CB   GLN  2110     34.131 -13.556  65.041  1.00 37.71
ATOM  14023  CG   GLN  2110     35.596 -13.909  64.805  1.00 40.40
ATOM  14024  CD   GLN  2110     35.777 -15.115  63.894  1.00 41.71
ATOM  14025  OE1  GLN  2110     35.575 -16.259  64.303  1.00 42.12
ATOM  14026  NE2  GLN  2110     36.156 -14.858  62.645  1.00 42.57
ATOM  14027  C    GLN  2110     33.619 -14.778  67.179  1.00 37.51
ATOM  14028  O    GLN  2110     34.441 -15.595  67.588  1.00 39.31
ATOM  14029  N    LYS  2111     32.954 -13.956  67.987  1.00 38.46
ATOM  14030  CA   LYS  2111     33.157 -13.980  69.430  1.00 39.03
ATOM  14031  CB   LYS  2111     32.407 -12.824  70.098  1.00 41.13
ATOM  14032  CG   LYS  2111     32.493 -12.839  71.621  1.00 44.09
ATOM  14033  CD   LYS  2111     31.376 -12.035  72.275  1.00 45.16
ATOM  14034  CE   LYS  2111     31.450 -10.557  71.933  1.00 46.74
ATOM  14035  NZ   LYS  2111     30.408  -9.785  72.674  1.00 47.25
ATOM  14036  C    LYS  2111     32.637 -15.301  69.989  1.00 38.63
ATOM  14037  O    LYS  2111     33.282 -15.931  70.825  1.00 37.38
ATOM  14038  N    TYR  2112     31.463 -15.714  69.521  1.00 38.15
ATOM  14039  CA   TYR  2112     30.845 -16.959  69.970  1.00 37.96
ATOM  14040  CB   TYR  2112     29.506 -17.168  69.256  1.00 39.49
ATOM  14041  CG   TYR  2112     28.385 -16.279  69.755  1.00 41.55
ATOM  14042  CD1  TYR  2112     27.152 -16.250  69.101  1.00 42.17
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ATOM   14043  CE1 TYR  2112      26.106 -15.461  69.569  1.00 43.58
ATOM   14044  CD2 TYR  2112      28.544 -15.488  70.897  1.00 42.83
ATOM   14045  CE2 TYR  2112      27.503 -14.695  71.374  1.00 43.95
ATOM   14046  CZ  TYR  2112      26.288 -14.687  70.707  1.00 44.41
ATOM   14047  OH  TYR  2112      25.256 -13.912  71.176  1.00 46.08
ATOM   14048  C   TYR  2112      31.725 -18.190  69.761  1.00 37.30
ATOM   14049  O   TYR  2112      31.765 -19.080  70.610  1.00 35.99
ATOM   14050  N   LYS  2113      32.417 -18.254  68.628  1.00 36.90
ATOM   14051  CA  LYS  2113      33.280 -19.400  68.362  1.00 38.21
ATOM   14052  CB  LYS  2113      33.784 -19.378  66.914  1.00 36.95
ATOM   14053  CG  LYS  2113      34.652 -20.579  66.560  1.00 34.27
ATOM   14054  CD  LYS  2113      34.828 -20.750  65.061  1.00 32.97
ATOM   14055  CE  LYS  2113      35.585 -22.041  64.761  1.00 32.84
ATOM   14056  NZ  LYS  2113      35.432 -22.499  63.348  1.00 30.32
ATOM   14057  C   LYS  2113      34.465 -19.411  69.328  1.00 38.99
ATOM   14058  O   LYS  2113      34.891 -20.471  69.782  1.00 38.16
ATOM   14059  N   GLN  2114      34.988 -18.229  69.639  1.00 40.94
ATOM   14060  CA  GLN  2114      36.116 -18.110  70.557  1.00 42.72
ATOM   14061  CB  GLN  2114      36.574 -16.653  70.652  1.00 44.16
ATOM   14062  CG  GLN  2114      37.245 -16.133  69.390  1.00 48.37
ATOM   14063  CD  GLN  2114      37.620 -14.663  69.486  1.00 51.00
ATOM   14064  OE1 GLN  2114      38.357 -14.254  70.386  1.00 53.01
ATOM   14065  NE2 GLN  2114      37.117 -13.861  68.551  1.00 51.71
ATOM   14066  C   GLN  2114      35.736 -18.617  71.942  1.00 42.63
ATOM   14067  O   GLN  2114      36.537 -19.263  72.616  1.00 42.99
ATOM   14068  N   GLU  2115      34.508 -18.320  72.358  1.00 42.51
ATOM   14069  CA  GLU  2115      34.016 -18.745  73.664  1.00 42.44
ATOM   14070  CB  GLU  2115      33.001 -17.736  74.207  1.00 44.97
ATOM   14071  CG  GLU  2115      33.467 -16.292  74.162  1.00 47.71
ATOM   14072  CD  GLU  2115      32.482 -15.348  74.816  1.00 49.87
ATOM   14073  OE1 GLU  2115      31.281 -15.405  74.472  1.00 50.50
ATOM   14074  OE2 GLU  2115      32.911 -14.545  75.674  1.00 52.16
ATOM   14075  C   GLU  2115      33.356 -20.114  73.558  1.00 40.83
ATOM   14076  O   GLU  2115      32.806 -20.624  74.532  1.00 40.15
ATOM   14077  N   LYS  2116      33.410 -20.701  72.368  1.00 39.34
ATOM   14078  CA  LYS  2116      32.819 -22.010  72.130  1.00 38.09
ATOM   14079  CB  LYS  2116      33.578 -23.079  72.923  1.00 40.37
ATOM   14080  CG  LYS  2116      35.049 -23.210  72.540  1.00 42.96
ATOM   14081  CD  LYS  2116      35.213 -23.602  71.075  1.00 45.90
ATOM   14082  CE  LYS  2116      36.679 -23.631  70.646  1.00 47.03
ATOM   14083  NZ  LYS  2116      37.471 -24.671  71.351  1.00 46.52
ATOM   14084  C   LYS  2116      31.332 -22.042  72.493  1.00 36.61
ATOM   14085  O   LYS  2116      30.836 -23.016  73.062  1.00 35.86
ATOM   14086  N   LYS  2117      30.620 -20.972  72.159  1.00 35.40
ATOM   14087  CA  LYS  2117      29.193 -20.908  72.444  1.00 33.94
ATOM   14088  CB  LYS  2117      28.838 -19.570  73.100  1.00 34.82
ATOM   14089  CG  LYS  2117      27.338 -19.354  73.271  1.00 36.44
ATOM   14090  CD  LYS  2117      27.039 -18.265  74.290  1.00 38.88
ATOM   14091  CE  LYS  2117      27.406 -18.729  75.695  1.00 39.51
ATOM   14092  NZ  LYS  2117      27.253 -17.658  76.714  1.00 41.13
ATOM   14093  C   LYS  2117      28.381 -21.107  71.166  1.00 32.80
ATOM   14094  O   LYS  2117      28.336 -20.232  70.300  1.00 31.72
ATOM   14095  N   ARG  2118      27.752 -22.274  71.060  1.00 30.34
ATOM   14096  CA  ARG  2118      26.938 -22.628  69.902  1.00 30.20
ATOM   14097  CB  ARG  2118      26.539 -24.105  69.984  1.00 30.53
ATOM   14098  CG  ARG  2118      27.675 -25.045  69.596  1.00 32.66
ATOM   14099  CD  ARG  2118      27.360 -26.506  69.872  1.00 33.98
ATOM   14100  NE  ARG  2118      27.573 -26.853  71.274  1.00 34.15
ATOM   14101  CZ  ARG  2118      27.601 -28.097  71.741  1.00 33.23
ATOM   14102  NH1 ARG  2118      27.427 -29.121  70.918  1.00 33.99
ATOM   14103  NH2 ARG  2118      27.816 -28.321  73.031  1.00 31.99
ATOM   14104  C   ARG  2118      25.703 -21.734  69.800  1.00 28.50
ATOM   14105  O   ARG  2118      24.919 -21.635  70.741  1.00 28.26
ATOM   14106  N   PHE  2119      25.546 -21.089  68.647  1.00 27.02
ATOM   14107  CA  PHE  2119      24.440 -20.171  68.403  1.00 25.78
ATOM   14108  CB  PHE  2119      25.002 -18.816  67.965  1.00 26.66
ATOM   14109  CG  PHE  2119      25.831 -18.883  66.710  1.00 28.65
ATOM   14110  CD1 PHE  2119      25.236 -18.742  65.457  1.00 27.88
ATOM   14111  CD2 PHE  2119      27.205 -19.110  66.779  1.00 27.56
ATOM   14112  CE1 PHE  2119      25.997 -18.821  64.294  1.00 29.01
ATOM   14113  CE2 PHE  2119      27.975 -19.192  65.624  1.00 28.48
ATOM   14114  CZ  PHE  2119      27.371 -19.047  64.377  1.00 29.61
ATOM   14115  C   PHE  2119      23.464 -20.693  67.351  1.00 24.24
ATOM   14116  O   PHE  2119      23.861 -21.375  66.404  1.00 20.96
ATOM   14117  N   ALA  2120      22.186 -20.365  67.515  1.00 23.46
ATOM   14118  CA  ALA  2120      21.162 -20.810  66.577  1.00 23.11
ATOM   14119  CB  ALA  2120      19.886 -21.175  67.343  1.00 25.46
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ATOM   14120  C    ALA   2120    20.857 -19.756  65.510  1.00 22.49
ATOM   14121  O    ALA   2120    20.928 -18.553  65.765  1.00 20.69
ATOM   14122  N    THR   2121    20.529 -20.225  64.309  1.00 20.02
ATOM   14123  CA   THR   2121    20.198 -19.350  63.186  1.00 21.26
ATOM   14124  CB   THR   2121    21.324 -19.357  62.125  1.00 22.14
ATOM   14125  OG1  THR   2121    22.552 -18.930  62.734  1.00 27.92
ATOM   14126  CG2  THR   2121    20.987 -18.424  60.985  1.00 29.91
ATOM   14127  C    THR   2121    18.923 -19.922  62.577  1.00 17.16
ATOM   14128  O    THR   2121    18.651 -21.104  62.731  1.00 17.14
ATOM   14129  N    ILE   2122    18.139 -19.102  61.885  1.00 18.16
ATOM   14130  CA   ILE   2122    16.898 -19.608  61.308  1.00 16.98
ATOM   14131  CB   ILE   2122    15.737 -19.454  62.321  1.00 19.66
ATOM   14132  CG2  ILE   2122    15.365 -17.977  62.470  1.00 18.99
ATOM   14133  CG1  ILE   2122    14.526 -20.260  61.856  1.00 20.97
ATOM   14134  CD1  ILE   2122    13.404 -20.310  62.873  1.00 23.87
ATOM   14135  C    ILE   2122    16.545 -18.882  60.020  1.00 16.60
ATOM   14136  O    ILE   2122    17.017 -17.772  59.792  1.00 17.43
ATOM   14137  N    THR   2123    15.743 -19.513  59.166  1.00 18.07
ATOM   14138  CA   THR   2123    15.330 -18.866  57.923  1.00 17.40
ATOM   14139  CB   THR   2123    14.902 -19.892  56.836  1.00 19.53
ATOM   14140  OG1  THR   2123    13.739 -20.612  57.278  1.00 20.71
ATOM   14141  CG2  THR   2123    16.039 -20.876  56.547  1.00 19.80
ATOM   14142  C    THR   2123    14.134 -17.973  58.229  1.00 16.12
ATOM   14143  O    THR   2123    13.373 -18.244  59.152  1.00 17.78
ATOM   14144  N    ALA   2124    13.978 -16.903  57.459  1.00 16.44
ATOM   14145  CA   ALA   2124    12.863 -15.976  57.646  1.00 15.59
ATOM   14146  CB   ALA   2124    13.226 -14.918  58.685  1.00 17.03
ATOM   14147  C    ALA   2124    12.600 -15.330  56.291  1.00 14.67
ATOM   14148  O    ALA   2124    13.539 -15.046  55.556  1.00 13.64
ATOM   14149  N    TYR   2125    11.331 -15.107  55.956  1.00 13.33
ATOM   14150  CA   TYR   2125    10.985 -14.521  54.659  1.00 12.55
ATOM   14151  CB   TYR   2125    10.439 -15.599  53.712  1.00 14.08
ATOM   14152  CG   TYR   2125    11.166 -16.926  53.797  1.00 13.16
ATOM   14153  CD1  TYR   2125    10.597 -18.007  54.464  1.00 15.20
ATOM   14154  CE1  TYR   2125    11.268 -19.220  54.578  1.00 19.44
ATOM   14155  CD2  TYR   2125    12.436 -17.090  53.240  1.00 15.12
ATOM   14156  CE2  TYR   2125    13.122 -18.308  53.351  1.00 16.49
ATOM   14157  CZ   TYR   2125    12.527 -19.362  54.023  1.00 17.45
ATOM   14158  OH   TYR   2125    13.190 -20.559  54.160  1.00 18.95
ATOM   14159  C    TYR   2125     9.957 -13.401  54.752  1.00 14.84
ATOM   14160  O    TYR   2125     9.513 -12.876  53.726  1.00 13.18
ATOM   14161  N    ASP   2126     9.569 -13.030  55.967  1.00 15.18
ATOM   14162  CA   ASP   2126     8.586 -11.969  56.114  1.00 15.35
ATOM   14163  CB   ASP   2126     7.164 -12.552  55.980  1.00 16.11
ATOM   14164  CG   ASP   2126     6.804 -13.517  57.105  1.00 17.38
ATOM   14165  OD1  ASP   2126     6.660 -13.064  58.256  1.00 17.19
ATOM   14166  OD2  ASP   2126     6.665 -14.729  56.837  1.00 17.99
ATOM   14167  C    ASP   2126     8.740 -11.166  57.410  1.00 16.68
ATOM   14168  O    ASP   2126     9.480 -11.549  58.325  1.00 15.28
ATOM   14169  N    TYR   2127     8.046 -10.038  57.475  1.00 15.28
ATOM   14170  CA   TYR   2127     8.120  -9.164  58.641  1.00 17.17
ATOM   14171  CB   TYR   2127     7.276  -7.913  58.397  1.00 17.79
ATOM   14172  CG   TYR   2127     6.992  -7.109  59.641  1.00 17.73
ATOM   14173  CD1  TYR   2127     7.875  -6.122  60.075  1.00 20.38
ATOM   14174  CE1  TYR   2127     7.605  -5.367  61.218  1.00 20.48
ATOM   14175  CD2  TYR   2127     5.832  -7.331  60.379  1.00 20.09
ATOM   14176  CE2  TYR   2127     5.551  -6.590  61.519  1.00 22.06
ATOM   14177  CZ   TYR   2127     6.439  -5.610  61.930  1.00 23.04
ATOM   14178  OH   TYR   2127     6.152  -4.857  63.050  1.00 24.49
ATOM   14179  C    TYR   2127     7.671  -9.827  59.937  1.00 18.30
ATOM   14180  O    TYR   2127     8.354  -9.732  60.961  1.00 17.92
ATOM   14181  N    SER   2128     6.518 -10.487  59.886  1.00 19.07
ATOM   14182  CA   SER   2128     5.943 -11.136  61.055  1.00 21.09
ATOM   14183  CB   SER   2128     4.638 -11.836  60.682  1.00 22.18
ATOM   14184  OG   SER   2128     3.632 -10.872  60.424  1.00 21.45
ATOM   14185  C    SER   2128     6.861 -12.120  61.754  1.00 21.26
ATOM   14186  O    SER   2128     7.154 -11.960  62.943  1.00 20.52
ATOM   14187  N    PHE   2129     7.310 -13.143  61.036  1.00 18.91
ATOM   14188  CA   PHE   2129     8.194 -14.111  61.661  1.00 18.72
ATOM   14189  CB   PHE   2129     8.404 -15.338  60.770  1.00 19.49
ATOM   14190  CG   PHE   2129     7.255 -16.303  60.797  1.00 20.01
ATOM   14191  CD1  PHE   2129     6.312 -16.317  59.772  1.00 18.47
ATOM   14192  CD2  PHE   2129     7.101 -17.186  61.862  1.00 19.74
ATOM   14193  CE1  PHE   2129     5.238 -17.198  59.811  1.00 19.85
ATOM   14194  CE2  PHE   2129     6.030 -18.067  61.907  1.00 20.86
ATOM   14195  CZ   PHE   2129     5.094 -18.076  60.879  1.00 20.11
ATOM   14196  C    PHE   2129     9.527 -13.489  62.039  1.00 17.47
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ATOM	14197	O	PHE	2129	10.064	-13.799	63.097	1.00	19.26
ATOM	14198	N	ALA	2130	10.055	-12.599	61.200	1.00	18.95
ATOM	14199	CA	ALA	2130	11.333	-11.958	61.507	1.00	17.77
ATOM	14200	CB	ALA	2130	11.724	-11.007	60.396	1.00	17.99
ATOM	14201	C	ALA	2130	11.247	-11.203	62.830	1.00	20.34
ATOM	14202	O	ALA	2130	12.143	-11.284	63.673	1.00	17.97
ATOM	14203	N	LYS	2131	10.156	-10.465	63.001	1.00	19.46
ATOM	14204	CA	LYS	2131	9.932	-9.692	64.215	1.00	22.35
ATOM	14205	CB	LYS	2131	8.625	-8.900	64.090	1.00	23.83
ATOM	14206	CG	LYS	2131	8.301	-7.979	65.265	1.00	26.46
ATOM	14207	CD	LYS	2131	9.254	-6.793	65.315	1.00	29.95
ATOM	14208	CE	LYS	2131	8.767	-5.717	66.277	1.00	30.64
ATOM	14209	NZ	LYS	2131	8.650	-6.214	67.675	1.00	32.08
ATOM	14210	C	LYS	2131	9.861	-10.627	65.420	1.00	21.60
ATOM	14211	O	LYS	2131	10.447	-10.352	66.469	1.00	24.21
ATOM	14212	N	LEU	2132	9.149	-11.737	65.259	1.00	20.48
ATOM	14213	CA	LEU	2132	8.981	-12.712	66.331	1.00	21.79
ATOM	14214	CB	LEU	2132	8.000	-13.805	65.892	1.00	20.32
ATOM	14215	CG	LEU	2132	7.523	-14.833	66.930	1.00	21.91
ATOM	14216	CD1	LEU	2132	6.279	-15.525	66.407	1.00	21.23
ATOM	14217	CD2	LEU	2132	8.608	-15.864	67.222	1.00	19.41
ATOM	14218	C	LEU	2132	10.303	-13.335	66.764	1.00	21.65
ATOM	14219	O	LEU	2132	10.524	-13.577	67.954	1.00	20.18
ATOM	14220	N	PHE	2133	11.177	-13.615	65.803	1.00	20.32
ATOM	14221	CA	PHE	2133	12.474	-14.204	66.127	1.00	20.05
ATOM	14222	CB	PHE	2133	13.196	-14.655	64.851	1.00	18.15
ATOM	14223	CG	PHE	2133	12.452	-15.698	64.066	1.00	15.76
ATOM	14224	CD1	PHE	2133	11.618	-16.610	64.707	1.00	15.98
ATOM	14225	CD2	PHE	2133	12.598	-15.775	62.680	1.00	16.44
ATOM	14226	CE1	PHE	2133	10.934	-17.585	63.982	1.00	17.09
ATOM	14227	CE2	PHE	2133	11.922	-16.746	61.947	1.00	13.66
ATOM	14228	CZ	PHE	2133	11.087	-17.653	62.595	1.00	15.97
ATOM	14229	C	PHE	2133	13.344	-13.213	66.875	1.00	20.41
ATOM	14230	O	PHE	2133	13.940	-13.549	67.899	1.00	22.66
ATOM	14231	N	ALA	2134	13.420	-11.991	66.356	1.00	20.90
ATOM	14232	CA	ALA	2134	14.230	-10.952	66.977	1.00	22.59
ATOM	14233	CB	ALA	2134	14.139	-9.675	66.161	1.00	22.94
ATOM	14234	C	ALA	2134	13.799	-10.690	68.417	1.00	25.23
ATOM	14235	O	ALA	2134	14.636	-10.474	69.294	1.00	25.72
ATOM	14236	N	ASP	2135	12.494	-10.719	68.666	1.00	24.88
ATOM	14237	CA	ASP	2135	12.001	-10.471	70.017	1.00	27.30
ATOM	14238	CB	ASP	2135	10.489	-10.246	70.009	1.00	28.36
ATOM	14239	CG	ASP	2135	10.086	-8.973	69.291	1.00	28.77
ATOM	14240	OD1	ASP	2135	10.963	-8.137	68.993	1.00	29.20
ATOM	14241	OD2	ASP	2135	8.876	-8.808	69.034	1.00	28.65
ATOM	14242	C	ASP	2135	12.334	-11.593	71.000	1.00	27.17
ATOM	14243	O	ASP	2135	12.518	-11.342	72.189	1.00	26.00
ATOM	14244	N	GLU	2136	12.406	-12.828	70.510	1.00	27.96
ATOM	14245	CA	GLU	2136	12.708	-13.964	71.377	1.00	28.87
ATOM	14246	CB	GLU	2136	12.111	-15.247	70.809	1.00	27.56
ATOM	14247	CG	GLU	2136	10.611	-15.241	70.812	1.00	30.49
ATOM	14248	CD	GLU	2136	10.063	-14.819	72.157	1.00	31.36
ATOM	14249	OE1	GLU	2136	10.393	-15.491	73.158	1.00	32.34
ATOM	14250	OE2	GLU	2136	9.319	-13.816	72.207	1.00	28.17
ATOM	14251	C	GLU	2136	14.187	-14.178	71.629	1.00	29.36
ATOM	14252	O	GLU	2136	14.567	-14.891	72.559	1.00	30.73
ATOM	14253	N	GLY	2137	15.029	-13.581	70.794	1.00	30.45
ATOM	14254	CA	GLY	2137	16.461	-13.738	70.988	1.00	30.66
ATOM	14255	C	GLY	2137	17.255	-14.119	69.754	1.00	29.34
ATOM	14256	O	GLY	2137	18.475	-13.979	69.749	1.00	28.38
ATOM	14257	N	LEU	2138	16.572	-14.607	68.720	1.00	28.35
ATOM	14258	CA	LEU	2138	17.229	-15.003	67.471	1.00	26.93
ATOM	14259	CB	LEU	2138	16.304	-15.885	66.634	1.00	28.35
ATOM	14260	CG	LEU	2138	16.435	-17.385	66.848	1.00	27.76
ATOM	14261	CD1	LEU	2138	15.372	-18.123	66.059	1.00	24.29
ATOM	14262	CD2	LEU	2138	17.826	-17.827	66.426	1.00	29.18
ATOM	14263	C	LEU	2138	17.590	-13.765	66.674	1.00	27.25
ATOM	14264	O	LEU	2138	16.708	-13.065	66.183	1.00	27.95
ATOM	14265	N	ASN	2139	18.886	-13.508	66.536	1.00	24.39
ATOM	14266	CA	ASN	2139	19.344	-12.333	65.818	1.00	23.70
ATOM	14267	CB	ASN	2139	20.224	-11.464	66.722	1.00	27.76
ATOM	14268	CG	ASN	2139	19.509	-11.026	67.982	1.00	31.16
ATOM	14269	OD1	ASN	2139	18.415	-10.458	67.924	1.00	34.02
ATOM	14270	ND2	ASN	2139	20.125	-11.279	69.130	1.00	33.28
ATOM	14271	C	ASN	2139	20.112	-12.664	64.552	1.00	20.12
ATOM	14272	O	ASN	2139	20.800	-11.804	64.016	1.00	21.01
ATOM	14273	N	VAL	2140	20.020	-13.905	64.089	1.00	17.90

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ATOM   14274  CA  VAL  2140     20.703 -14.304  62.860  1.00 17.14
ATOM   14275  CB  VAL  2140     21.860 -15.287  63.124  1.00 19.66
ATOM   14276  CG1 VAL  2140     22.638 -15.512  61.834  1.00 17.34
ATOM   14277  CG2 VAL  2140     22.770 -14.735  64.215  1.00 21.32
ATOM   14278  C   VAL  2140     19.682 -14.991  61.969  1.00 14.62
ATOM   14279  O   VAL  2140     19.224 -16.085  62.273  1.00 14.94
ATOM   14280  N   MET  2141     19.324 -14.338  60.872  1.00 15.56
ATOM   14281  CA  MET  2141     18.332 -14.888  59.971  1.00 15.34
ATOM   14282  CB  MET  2141     17.066 -14.034  60.024  1.00 17.74
ATOM   14283  CG  MET  2141     16.383 -14.068  61.383  1.00 20.01
ATOM   14284  SD  MET  2141     15.060 -12.883  61.483  1.00 22.65
ATOM   14285  CE  MET  2141     15.531 -11.942  62.941  1.00 20.39
ATOM   14286  C   MET  2141     18.827 -14.989  58.548  1.00 14.81
ATOM   14287  O   MET  2141     19.577 -14.136  58.069  1.00 14.45
ATOM   14288  N   LEU  2142     18.393 -16.040  57.869  1.00 15.04
ATOM   14289  CA  LEU  2142     18.781 -16.250  56.483  1.00 15.97
ATOM   14290  CB  LEU  2142     19.477 -17.609  56.352  1.00 17.78
ATOM   14291  CG  LEU  2142     19.965 -18.146  54.997  1.00 23.22
ATOM   14292  CD1 LEU  2142     18.838 -18.861  54.306  1.00 25.80
ATOM   14293  CD2 LEU  2142     20.536 -17.032  54.136  1.00 22.00
ATOM   14294  C   LEU  2142     17.555 -16.182  55.572  1.00 14.69
ATOM   14295  O   LEU  2142     16.570 -16.886  55.781  1.00 14.54
ATOM   14296  N   VAL  2143     17.626 -15.299  54.582  1.00 13.79
ATOM   14297  CA  VAL  2143     16.567 -15.156  53.596  1.00 14.55
ATOM   14298  CB  VAL  2143     16.390 -13.691  53.162  1.00 15.17
ATOM   14299  CG1 VAL  2143     15.300 -13.584  52.093  1.00 17.16
ATOM   14300  CG2 VAL  2143     16.006 -12.837  54.379  1.00 16.68
ATOM   14301  C   VAL  2143     17.126 -15.985  52.450  1.00 14.62
ATOM   14302  O   VAL  2143     17.824 -15.466  51.583  1.00 15.21
ATOM   14303  N   GLY  2144     16.843 -17.283  52.474  1.00 16.51
ATOM   14304  CA  GLY  2144     17.379 -18.166  51.454  1.00 16.80
ATOM   14305  C   GLY  2144     16.441 -18.554  50.339  1.00 16.58
ATOM   14306  O   GLY  2144     15.221 -18.396  50.455  1.00 15.97
ATOM   14307  N   ASP  2145     17.009 -19.077  49.254  1.00 15.26
ATOM   14308  CA  ASP  2145     16.193 -19.474  48.107  1.00 16.47
ATOM   14309  CB  ASP  2145     17.066 -19.746  46.875  1.00 16.11
ATOM   14310  CG  ASP  2145     18.084 -20.849  47.095  1.00 17.05
ATOM   14311  OD1 ASP  2145     18.119 -21.434  48.182  1.00 15.53
ATOM   14312  OD2 ASP  2145     18.853 -21.122  46.159  1.00 20.23
ATOM   14313  C   ASP  2145     15.289 -20.667  48.406  1.00 14.31
ATOM   14314  O   ASP  2145     14.536 -21.124  47.542  1.00 13.80
ATOM   14315  N   SER  2146     15.350 -21.158  49.642  1.00 15.43
ATOM   14316  CA  SER  2146     14.475 -22.251  50.051  1.00 13.71
ATOM   14317  CB  SER  2146     14.764 -22.668  51.498  1.00 14.86
ATOM   14318  OG  SER  2146     14.708 -21.562  52.384  1.00 15.94
ATOM   14319  C   SER  2146     13.050 -21.724  49.938  1.00 13.48
ATOM   14320  O   SER  2146     12.086 -22.493  49.838  1.00 13.05
ATOM   14321  N   LEU  2147     12.911 -20.403  49.960  1.00 13.53
ATOM   14322  CA  LEU  2147     11.580 -19.798  49.848  1.00 15.06
ATOM   14323  CB  LEU  2147     11.676 -18.270  49.964  1.00 14.88
ATOM   14324  CG  LEU  2147     12.398 -17.474  48.868  1.00 15.50
ATOM   14325  CD1 LEU  2147     11.425 -17.211  47.718  1.00 12.97
ATOM   14326  CD2 LEU  2147     12.914 -16.144  49.442  1.00 14.61
ATOM   14327  C   LEU  2147     10.902 -20.193  48.532  1.00 15.02
ATOM   14328  O   LEU  2147      9.674 -20.120  48.406  1.00 13.70
ATOM   14329  N   GLY  2148     11.699 -20.618  47.556  1.00 13.80
ATOM   14330  CA  GLY  2148     11.129 -21.027  46.282  1.00 14.73
ATOM   14331  C   GLY  2148     10.168 -22.193  46.449  1.00 15.52
ATOM   14332  O   GLY  2148      9.240 -22.374  45.664  1.00 15.06
ATOM   14333  N   MET  2149     10.384 -22.984  47.490  1.00 16.51
ATOM   14334  CA  MET  2149      9.543 -24.142  47.739  1.00 18.26
ATOM   14335  CB  MET  2149     10.420 -25.344  48.105  1.00 19.59
ATOM   14336  CG  MET  2149     11.372 -25.737  46.979  1.00 23.21
ATOM   14337  SD  MET  2149     12.577 -27.009  47.403  1.00 26.89
ATOM   14338  CE  MET  2149     11.515 -28.406  47.735  1.00 27.42
ATOM   14339  C   MET  2149      8.525 -23.867  48.836  1.00 17.57
ATOM   14340  O   MET  2149      7.330 -24.072  48.643  1.00 18.80
ATOM   14341  N   THR  2150      9.000 -23.374  49.974  1.00 17.41
ATOM   14342  CA  THR  2150      8.125 -23.094  51.106  1.00 19.06
ATOM   14343  CB  THR  2150      8.947 -22.896  52.395  1.00 20.48
ATOM   14344  OG1 THR  2150      8.052 -22.760  53.500  1.00 28.01
ATOM   14345  CG2 THR  2150      9.819 -21.652  52.296  1.00 16.62
ATOM   14346  C   THR  2150      7.189 -21.893  50.948  1.00 19.09
ATOM   14347  O   THR  2150      6.085 -21.890  51.495  1.00 19.04
ATOM   14348  N   VAL  2151      7.631 -20.878  50.212  1.00 15.32
ATOM   14349  CA  VAL  2151      6.816 -19.688  50.000  1.00 15.78
ATOM   14350  CB  VAL  2151      7.660 -18.400  50.167  1.00 14.07
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ATOM	14351	CG1	VAL	2151	6.850	-17.167	49.740	1.00	14.82
ATOM	14352	CG2	VAL	2151	8.092	-18.258	51.629	1.00	16.78
ATOM	14353	C	VAL	2151	6.122	-19.683	48.634	1.00	15.00
ATOM	14354	O	VAL	2151	4.892	-19.573	48.554	1.00	12.68
ATOM	14355	N	GLN	2152	6.898	-19.827	47.562	1.00	12.81
ATOM	14356	CA	GLN	2152	6.332	-19.819	46.205	1.00	12.29
ATOM	14357	CB	GLN	2152	7.413	-19.435	45.195	1.00	9.78
ATOM	14358	CG	GLN	2152	8.125	-18.150	45.545	1.00	11.69
ATOM	14359	CD	GLN	2152	9.274	-17.866	44.616	1.00	12.80
ATOM	14360	OE1	GLN	2152	9.733	-18.750	43.901	1.00	13.02
ATOM	14361	NE2	GLN	2152	9.765	-16.630	44.639	1.00	10.46
ATOM	14362	C	GLN	2152	5.673	-21.127	45.773	1.00	13.36
ATOM	14363	O	GLN	2152	4.812	-21.127	44.897	1.00	13.82
ATOM	14364	N	GLY	2153	6.089	-22.244	46.368	1.00	14.36
ATOM	14365	CA	GLY	2153	5.485	-23.517	46.020	1.00	13.48
ATOM	14366	C	GLY	2153	6.071	-24.295	44.852	1.00	14.85
ATOM	14367	O	GLY	2153	5.409	-25.187	44.308	1.00	13.64
ATOM	14368	N	HIS	2154	7.301	-23.974	44.464	1.00	14.25
ATOM	14369	CA	HIS	2154	7.965	-24.675	43.362	1.00	16.22
ATOM	14370	CB	HIS	2154	9.061	-23.799	42.755	1.00	14.89
ATOM	14371	CG	HIS	2154	8.556	-22.555	42.100	1.00	16.52
ATOM	14372	CD2	HIS	2154	8.719	-21.251	42.426	1.00	15.21
ATOM	14373	ND1	HIS	2154	7.799	-22.572	40.949	1.00	16.03
ATOM	14374	CE1	HIS	2154	7.519	-21.332	40.595	1.00	18.56
ATOM	14375	NE2	HIS	2154	8.066	-20.512	41.474	1.00	18.50
ATOM	14376	C	HIS	2154	8.586	-25.991	43.836	1.00	17.17
ATOM	14377	O	HIS	2154	8.770	-26.202	45.032	1.00	17.56
ATOM	14378	N	ASP	2155	8.913	-26.868	42.889	1.00	18.27
ATOM	14379	CA	ASP	2155	9.507	-28.163	43.211	1.00	21.07
ATOM	14380	CB	ASP	2155	9.344	-29.141	42.041	1.00	26.36
ATOM	14381	CG	ASP	2155	10.020	-28.659	40.771	1.00	30.40
ATOM	14382	OD1	ASP	2155	11.238	-28.378	40.795	1.00	35.46
ATOM	14383	OD2	ASP	2155	9.331	-28.562	39.727	1.00	38.63
ATOM	14384	C	ASP	2155	10.986	-28.060	43.568	1.00	18.34
ATOM	14385	O	ASP	2155	11.600	-29.037	43.990	1.00	19.68
ATOM	14386	N	SER	2156	11.559	-26.878	43.387	1.00	17.56
ATOM	14387	CA	SER	2156	12.968	-26.667	43.692	1.00	14.88
ATOM	14388	CB	SER	2156	13.847	-27.160	42.535	1.00	15.97
ATOM	14389	OG	SER	2156	13.813	-26.262	41.438	1.00	12.59
ATOM	14390	C	SER	2156	13.215	-25.187	43.923	1.00	15.41
ATOM	14391	O	SER	2156	12.300	-24.372	43.791	1.00	14.28
ATOM	14392	N	THR	2157	14.449	-24.833	44.263	1.00	13.49
ATOM	14393	CA	THR	2157	14.776	-23.433	44.514	1.00	14.04
ATOM	14394	CB	THR	2157	15.901	-23.292	45.558	1.00	14.05
ATOM	14395	OG1	THR	2157	17.117	-23.825	45.018	1.00	16.03
ATOM	14396	CG2	THR	2157	15.550	-24.034	46.839	1.00	16.22
ATOM	14397	C	THR	2157	15.219	-22.668	43.270	1.00	13.58
ATOM	14398	O	THR	2157	15.329	-21.440	43.313	1.00	12.41
ATOM	14399	N	LEU	2158	15.450	-23.374	42.162	1.00	13.34
ATOM	14400	CA	LEU	2158	15.926	-22.722	40.937	1.00	12.31
ATOM	14401	CB	LEU	2158	16.087	-23.761	39.808	1.00	14.42
ATOM	14402	CG	LEU	2158	17.337	-24.646	39.959	1.00	16.63
ATOM	14403	CD1	LEU	2158	17.106	-25.616	41.104	1.00	17.91
ATOM	14404	CD2	LEU	2158	17.631	-25.409	38.669	1.00	18.40
ATOM	14405	C	LEU	2158	15.166	-21.500	40.413	1.00	12.03
ATOM	14406	O	LEU	2158	15.779	-20.523	40.004	1.00	11.95
ATOM	14407	N	PRO	2159	13.825	-21.526	40.437	1.00	11.73
ATOM	14408	CD	PRO	2159	12.922	-22.627	40.802	1.00	13.77
ATOM	14409	CA	PRO	2159	13.060	-20.378	39.941	1.00	11.00
ATOM	14410	CB	PRO	2159	11.629	-20.913	39.914	1.00	13.29
ATOM	14411	CG	PRO	2159	11.619	-21.891	41.005	1.00	17.80
ATOM	14412	C	PRO	2159	13.181	-19.078	40.737	1.00	8.57
ATOM	14413	O	PRO	2159	12.796	-18.016	40.253	1.00	10.80
ATOM	14414	N	VAL	2160	13.717	-19.147	41.949	1.00	9.75
ATOM	14415	CA	VAL	2160	13.856	-17.939	42.764	1.00	10.64
ATOM	14416	CB	VAL	2160	14.334	-18.295	44.191	1.00	7.98
ATOM	14417	CG1	VAL	2160	14.487	-17.023	45.046	1.00	8.99
ATOM	14418	CG2	VAL	2160	13.339	-19.249	44.833	1.00	9.25
ATOM	14419	C	VAL	2160	14.827	-16.956	42.120	1.00	10.30
ATOM	14420	O	VAL	2160	15.966	-17.302	41.812	1.00	12.24
ATOM	14421	N	THR	2161	14.373	-15.718	41.940	1.00	10.56
ATOM	14422	CA	THR	2161	15.193	-14.686	41.310	1.00	13.51
ATOM	14423	CB	THR	2161	14.344	-13.853	40.324	1.00	17.26
ATOM	14424	OG1	THR	2161	13.616	-14.733	39.449	1.00	18.29
ATOM	14425	CG2	THR	2161	15.234	-12.954	39.478	1.00	19.77
ATOM	14426	C	THR	2161	15.811	-13.747	42.335	1.00	10.55
ATOM	14427	O	THR	2161	15.417	-13.755	43.496	1.00	11.77

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ATOM  14428  N    VAL  2162    16.777 -12.940  41.897  1.00 12.13
ATOM  14429  CA   VAL  2162    17.435 -11.979  42.778  1.00 13.71
ATOM  14430  CB   VAL  2162    18.538 -11.216  42.019  1.00 15.08
ATOM  14431  CG1  VAL  2162    19.051 -10.057  42.858  1.00 16.93
ATOM  14432  CG2  VAL  2162    19.674 -12.172  41.676  1.00 15.68
ATOM  14433  C    VAL  2162    16.387 -11.000  43.310  1.00 13.50
ATOM  14434  O    VAL  2162    16.436 -10.571  44.469  1.00 14.68
ATOM  14435  N    ALA  2163    15.429 -10.662  42.455  1.00 13.50
ATOM  14436  CA   ALA  2163    14.352  -9.751  42.827  1.00 12.58
ATOM  14437  CB   ALA  2163    13.454  -9.473  41.606  1.00 13.55
ATOM  14438  C    ALA  2163    13.527 -10.352  43.956  1.00 12.11
ATOM  14439  O    ALA  2163    13.094  -9.637  44.872  1.00 10.50
ATOM  14440  N    ASP  2164    13.287 -11.664  43.886  1.00 10.69
ATOM  14441  CA   ASP  2164    12.515 -12.340  44.938  1.00 12.32
ATOM  14442  CB   ASP  2164    12.282 -13.822  44.607  1.00 10.37
ATOM  14443  CG   ASP  2164    11.413 -14.029  43.373  1.00 14.18
ATOM  14444  OD1  ASP  2164    10.593 -13.141  43.044  1.00 14.70
ATOM  14445  OD2  ASP  2164    11.546 -15.107  42.745  1.00 14.94
ATOM  14446  C    ASP  2164    13.272 -12.250  46.260  1.00 12.25
ATOM  14447  O    ASP  2164    12.696 -11.971  47.313  1.00 11.28
ATOM  14448  N    ILE  2165    14.574 -12.500  46.212  1.00 13.30
ATOM  14449  CA   ILE  2165    15.363 -12.429  47.433  1.00 11.13
ATOM  14450  CB   ILE  2165    16.827 -12.815  47.165  1.00 10.95
ATOM  14451  CG2  ILE  2165    17.668 -12.571  48.418  1.00 12.50
ATOM  14452  CG1  ILE  2165    16.905 -14.287  46.734  1.00  9.88
ATOM  14453  CD1  ILE  2165    16.581 -15.294  47.819  1.00 13.15
ATOM  14454  C    ILE  2165    15.317 -11.024  48.041  1.00 11.12
ATOM  14455  O    ILE  2165    15.125 -10.861  49.249  1.00 12.10
ATOM  14456  N    ALA  2166    15.478 -10.016  47.195  1.00 11.76
ATOM  14457  CA   ALA  2166    15.471  -8.618  47.634  1.00 11.59
ATOM  14458  CB   ALA  2166    15.742  -7.710  46.439  1.00 13.22
ATOM  14459  C    ALA  2166    14.154  -8.214  48.303  1.00 13.49
ATOM  14460  O    ALA  2166    14.139  -7.453  49.278  1.00 12.63
ATOM  14461  N    TYR  2167    13.056  -8.704  47.738  1.00 12.03
ATOM  14462  CA   TYR  2167    11.710  -8.448  48.230  1.00 12.41
ATOM  14463  CB   TYR  2167    10.711  -9.189  47.334  1.00 13.48
ATOM  14464  CG   TYR  2167     9.281  -9.135  47.805  1.00 12.75
ATOM  14465  CD1  TYR  2167     8.555  -7.946  47.742  1.00 15.28
ATOM  14466  CE1  TYR  2167     7.228  -7.895  48.153  1.00 14.62
ATOM  14467  CD2  TYR  2167     8.645 -10.276  48.299  1.00 13.65
ATOM  14468  CE2  TYR  2167     7.316 -10.233  48.715  1.00 13.81
ATOM  14469  CZ   TYR  2167     6.617  -9.038  48.637  1.00 13.06
ATOM  14470  OH   TYR  2167     5.303  -8.988  49.050  1.00 15.51
ATOM  14471  C    TYR  2167    11.578  -8.966  49.660  1.00 13.47
ATOM  14472  O    TYR  2167    11.200  -8.242  50.585  1.00 14.07
ATOM  14473  N    HIS  2168    11.902 -10.241  49.824  1.00 13.89
ATOM  14474  CA   HIS  2168    11.823 -10.890  51.120  1.00 13.79
ATOM  14475  CB   HIS  2168    11.943 -12.403  50.929  1.00 12.97
ATOM  14476  CG   HIS  2168    10.731 -13.014  50.289  1.00 14.62
ATOM  14477  CD2  HIS  2168    10.491 -13.400  49.012  1.00 13.57
ATOM  14478  ND1  HIS  2168     9.554 -13.220  50.976  1.00 13.84
ATOM  14479  CE1  HIS  2168     8.641 -13.706  50.152  1.00 15.74
ATOM  14480  NE2  HIS  2168     9.185 -13.825  48.954  1.00 11.68
ATOM  14481  C    HIS  2168    12.870 -10.356  52.104  1.00 14.35
ATOM  14482  O    HIS  2168    12.634 -10.331  53.313  1.00 14.35
ATOM  14483  N    THR  2169    14.011  -9.913  51.585  1.00 14.47
ATOM  14484  CA   THR  2169    15.068  -9.369  52.428  1.00 14.38
ATOM  14485  CB   THR  2169    16.367  -9.150  51.611  1.00 15.28
ATOM  14486  OG1  THR  2169    16.949 -10.425  51.308  1.00 12.29
ATOM  14487  CG2  THR  2169    17.369  -8.307  52.395  1.00 14.61
ATOM  14488  C    THR  2169    14.617  -8.050  53.079  1.00 14.47
ATOM  14489  O    THR  2169    14.784  -7.857  54.288  1.00 14.08
ATOM  14490  N    ALA  2170    14.025  -7.155  52.294  1.00 13.56
ATOM  14491  CA   ALA  2170    13.567  -5.886  52.840  1.00 13.22
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ATOM  14493  C    ALA  2170    12.498  -6.141  53.905  1.00 15.28
ATOM  14494  O    ALA  2170    12.467  -5.471  54.946  1.00 14.21
ATOM  14495  N    ALA  2171    11.635  -7.123  53.657  1.00 15.33
ATOM  14496  CA   ALA  2171    10.580  -7.447  54.613  1.00 15.79
ATOM  14497  CB   ALA  2171     9.646  -8.500  54.033  1.00 15.59
ATOM  14498  C    ALA  2171    11.163  -7.932  55.936  1.00 16.82
ATOM  14499  O    ALA  2171    10.733  -7.500  57.010  1.00 16.97
ATOM  14500  N    VAL  2172    12.146  -8.824  55.868  1.00 16.63
ATOM  14501  CA   VAL  2172    12.771  -9.341  57.085  1.00 16.23
ATOM  14502  CB   VAL  2172    13.769 -10.494  56.762  1.00 17.51
ATOM  14503  CG1  VAL  2172    14.616 -10.818  57.979  1.00 14.14
ATOM  14504  CG2  VAL  2172    12.999 -11.742  56.338  1.00 16.91
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ATOM	14505	C	VAL	2172	13.484	-8.213	57.831	1.00	16.90
ATOM	14506	O	VAL	2172	13.432	-8.155	59.063	1.00	18.87
ATOM	14507	N	ARG	2173	14.138	-7.321	57.089	1.00	16.84
ATOM	14508	CA	ARG	2173	14.860	-6.195	57.689	1.00	17.87
ATOM	14509	CB	ARG	2173	15.594	-5.380	56.613	1.00	18.06
ATOM	14510	CG	ARG	2173	16.334	-4.149	57.156	1.00	17.82
ATOM	14511	CD	ARG	2173	17.239	-4.512	58.340	1.00	19.45
ATOM	14512	NE	ARG	2173	18.482	-5.163	57.929	1.00	18.22
ATOM	14513	CZ	ARG	2173	19.265	-5.871	58.740	1.00	18.73
ATOM	14514	NH1	ARG	2173	18.946	-6.037	60.017	1.00	17.92
ATOM	14515	NH2	ARG	2173	20.375	-6.418	58.274	1.00	17.07
ATOM	14516	C	ARG	2173	13.915	-5.283	58.467	1.00	19.95
ATOM	14517	O	ARG	2173	14.280	-4.753	59.523	1.00	18.61
ATOM	14518	N	ARG	2174	12.707	-5.089	57.945	1.00	18.95
ATOM	14519	CA	ARG	2174	11.722	-4.260	58.638	1.00	20.06
ATOM	14520	CB	ARG	2174	10.477	-4.041	57.774	1.00	18.51
ATOM	14521	CG	ARG	2174	10.726	-3.306	56.483	1.00	20.20
ATOM	14522	CD	ARG	2174	9.422	-2.876	55.813	1.00	22.84
ATOM	14523	NE	ARG	2174	9.707	-2.195	54.558	1.00	24.12
ATOM	14524	CZ	ARG	2174	9.783	-2.796	53.375	1.00	26.27
ATOM	14525	NH1	ARG	2174	9.576	-4.103	53.268	1.00	23.46
ATOM	14526	NH2	ARG	2174	10.109	-2.092	52.302	1.00	28.61
ATOM	14527	C	ARG	2174	11.319	-4.976	59.916	1.00	19.12
ATOM	14528	O	ARG	2174	11.045	-4.344	60.932	1.00	22.06
ATOM	14529	N	GLY	2175	11.289	-6.304	59.863	1.00	18.76
ATOM	14530	CA	GLY	2175	10.910	-7.080	61.034	1.00	19.18
ATOM	14531	C	GLY	2175	11.974	-7.136	62.117	1.00	19.83
ATOM	14532	O	GLY	2175	11.662	-7.173	63.311	1.00	19.15
ATOM	14533	N	ALA	2176	13.235	-7.126	61.695	1.00	17.37
ATOM	14534	CA	ALA	2176	14.365	-7.203	62.619	1.00	19.31
ATOM	14535	CB	ALA	2176	14.875	-8.644	62.690	1.00	20.30
ATOM	14536	C	ALA	2176	15.481	-6.278	62.155	1.00	20.49
ATOM	14537	O	ALA	2176	16.462	-6.728	61.560	1.00	20.07
ATOM	14538	N	PRO	2177	15.354	-4.972	62.444	1.00	21.58
ATOM	14539	CD	PRO	2177	14.298	-4.390	63.294	1.00	22.88
ATOM	14540	CA	PRO	2177	16.328	-3.943	62.064	1.00	22.64
ATOM	14541	CB	PRO	2177	15.653	-2.655	62.514	1.00	22.85
ATOM	14542	CG	PRO	2177	14.934	-3.088	63.739	1.00	25.21
ATOM	14543	C	PRO	2177	17.734	-4.080	62.631	1.00	22.77
ATOM	14544	O	PRO	2177	18.663	-3.437	62.139	1.00	23.87
ATOM	14545	N	ASN	2178	17.902	-4.910	63.654	1.00	22.77
ATOM	14546	CA	ASN	2178	19.222	-5.085	64.255	1.00	24.54
ATOM	14547	CB	ASN	2178	19.166	-4.740	65.747	1.00	28.89
ATOM	14548	CG	ASN	2178	18.808	-3.287	65.993	1.00	31.12
ATOM	14549	OD1	ASN	2178	19.380	-2.389	65.380	1.00	32.75
ATOM	14550	ND2	ASN	2178	17.861	-3.049	66.897	1.00	35.74
ATOM	14551	C	ASN	2178	19.814	-6.482	64.078	1.00	22.89
ATOM	14552	O	ASN	2178	20.908	-6.771	64.573	1.00	21.60
ATOM	14553	N	CYS	2179	19.105	-7.343	63.359	1.00	21.20
ATOM	14554	CA	CYS	2179	19.578	-8.708	63.156	1.00	19.54
ATOM	14555	CB	CYS	2179	18.419	-9.616	62.719	1.00	22.19
ATOM	14556	SG	CYS	2179	18.150	-9.714	60.895	1.00	21.61
ATOM	14557	C	CYS	2179	20.686	-8.781	62.114	1.00	18.00
ATOM	14558	O	CYS	2179	20.898	-7.845	61.336	1.00	16.56
ATOM	14559	N	LEU	2180	21.427	-9.882	62.144	1.00	17.26
ATOM	14560	CA	LEU	2180	22.466	-10.121	61.147	1.00	18.03
ATOM	14561	CB	LEU	2180	23.559	-11.046	61.684	1.00	18.50
ATOM	14562	CG	LEU	2180	24.622	-11.437	60.655	1.00	18.21
ATOM	14563	CD1	LEU	2180	25.331	-10.206	60.115	1.00	19.75
ATOM	14564	CD2	LEU	2180	25.616	-12.392	61.293	1.00	21.75
ATOM	14565	C	LEU	2180	21.647	-10.853	60.092	1.00	15.89
ATOM	14566	O	LEU	2180	21.164	-11.958	60.338	1.00	15.61
ATOM	14567	N	LEU	2181	21.483	-10.229	58.933	1.00	16.34
ATOM	14568	CA	LEU	2181	20.675	-10.802	57.865	1.00	15.32
ATOM	14569	CB	LEU	2181	19.730	-9.734	57.308	1.00	14.91
ATOM	14570	CG	LEU	2181	18.435	-10.175	56.612	1.00	15.55
ATOM	14571	CD1	LEU	2181	17.575	-8.936	56.395	1.00	16.38
ATOM	14572	CD2	LEU	2181	18.736	-10.863	55.293	1.00	20.67
ATOM	14573	C	LEU	2181	21.498	-11.382	56.727	1.00	13.75
ATOM	14574	O	LEU	2181	22.225	-10.657	56.053	1.00	14.71
ATOM	14575	N	LEU	2182	21.400	-12.690	56.525	1.00	13.90
ATOM	14576	CA	LEU	2182	22.123	-13.329	55.435	1.00	15.95
ATOM	14577	CB	LEU	2182	22.726	-14.660	55.875	1.00	15.67
ATOM	14578	CG	LEU	2182	24.149	-14.629	56.437	1.00	20.08
ATOM	14579	CD1	LEU	2182	24.196	-13.819	57.715	1.00	19.21
ATOM	14580	CD2	LEU	2182	24.609	-16.065	56.686	1.00	19.28
ATOM	14581	C	LEU	2182	21.136	-13.585	54.308	1.00	15.71

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ATOM   14582  O   LEU  2182      20.040 -14.075  54.552  1.00 19.38
ATOM   14583  N   ALA  2183      21.508 -13.246  53.081  1.00 13.91
ATOM   14584  CA  ALA  2183      20.614 -13.486  51.962  1.00 14.60
ATOM   14585  CB  ALA  2183      20.126 -12.169  51.386  1.00 13.61
ATOM   14586  C   ALA  2183      21.314 -14.305  50.893  1.00 14.00
ATOM   14587  O   ALA  2183      22.471 -14.049  50.538  1.00 11.35
ATOM   14588  N   ASP  2184      20.609 -15.309  50.388  1.00 14.08
ATOM   14589  CA  ASP  2184      21.169 -16.162  49.346  1.00 16.54
ATOM   14590  CB  ASP  2184      20.341 -17.439  49.180  1.00 16.86
ATOM   14591  CG  ASP  2184      20.733 -18.535  50.138  1.00 20.98
ATOM   14592  OD1 ASP  2184      21.818 -18.459  50.747  1.00 22.21
ATOM   14593  OD2 ASP  2184      19.945 -19.496  50.255  1.00 20.02
ATOM   14594  C   ASP  2184      21.177 -15.479  47.997  1.00 14.79
ATOM   14595  O   ASP  2184      20.295 -14.678  47.694  1.00 15.78
ATOM   14596  N   LEU  2185      22.200 -15.764  47.200  1.00 14.30
ATOM   14597  CA  LEU  2185      22.205 -15.275  45.831  1.00 13.25
ATOM   14598  CB  LEU  2185      23.614 -15.010  45.302  1.00 15.09
ATOM   14599  CG  LEU  2185      24.210 -13.667  45.767  1.00 16.23
ATOM   14600  CD1 LEU  2185      25.463 -13.358  44.938  1.00 17.48
ATOM   14601  CD2 LEU  2185      23.181 -12.546  45.571  1.00 14.68
ATOM   14602  C   LEU  2185      21.618 -16.538  45.211  1.00 13.97
ATOM   14603  O   LEU  2185      22.118 -17.652  45.436  1.00 13.10
ATOM   14604  N   PRO  2186      20.525 -16.391  44.456  1.00 14.11
ATOM   14605  CD  PRO  2186      19.831 -15.118  44.188  1.00 15.09
ATOM   14606  CA  PRO  2186      19.847 -17.516  43.817  1.00 14.43
ATOM   14607  CB  PRO  2186      18.510 -16.910  43.396  1.00 15.40
ATOM   14608  CG  PRO  2186      18.872 -15.483  43.085  1.00 15.67
ATOM   14609  C   PRO  2186      20.584 -18.177  42.663  1.00 14.33
ATOM   14610  O   PRO  2186      21.688 -17.782  42.302  1.00 15.03
ATOM   14611  N   PHE  2187      19.945 -19.197  42.100  1.00 13.69
ATOM   14612  CA  PHE  2187      20.481 -19.951  40.977  1.00 12.48
ATOM   14613  CB  PHE  2187      19.404 -20.933  40.493  1.00 10.11
ATOM   14614  CG  PHE  2187      19.660 -21.528  39.131  1.00 13.16
ATOM   14615  CD1 PHE  2187      20.749 -22.365  38.904  1.00 11.33
ATOM   14616  CD2 PHE  2187      18.751 -21.300  38.088  1.00 12.80
ATOM   14617  CE1 PHE  2187      20.934 -22.979  37.655  1.00 14.13
ATOM   14618  CE2 PHE  2187      18.914 -21.899  36.837  1.00 12.25
ATOM   14619  CZ  PHE  2187      20.005 -22.739  36.619  1.00 13.80
ATOM   14620  C   PHE  2187      20.938 -19.024  39.849  1.00 11.25
ATOM   14621  O   PHE  2187      20.224 -18.098  39.452  1.00 11.41
ATOM   14622  N   MET  2188      22.147 -19.282  39.358  1.00 12.61
ATOM   14623  CA  MET  2188      22.762 -18.531  38.275  1.00 13.77
ATOM   14624  CB  MET  2188      22.055 -18.862  36.943  1.00 13.96
ATOM   14625  CG  MET  2188      22.956 -18.723  35.707  1.00 16.90
ATOM   14626  SD  MET  2188      24.400 -19.853  35.851  1.00 12.86
ATOM   14627  CE  MET  2188      23.813 -21.357  35.069  1.00 19.25
ATOM   14628  C   MET  2188      22.778 -17.015  38.519  1.00 14.59
ATOM   14629  O   MET  2188      22.648 -16.226  37.584  1.00 16.18
ATOM   14630  N   ALA  2189      22.933 -16.599  39.775  1.00 13.29
ATOM   14631  CA  ALA  2189      22.986 -15.167  40.099  1.00 13.72
ATOM   14632  CB  ALA  2189      22.112 -14.864  41.333  1.00 12.70
ATOM   14633  C   ALA  2189      24.437 -14.747  40.359  1.00 14.21
ATOM   14634  O   ALA  2189      24.719 -13.580  40.633  1.00 15.89
ATOM   14635  N   TYR  2190      25.357 -15.708  40.278  1.00 12.28
ATOM   14636  CA  TYR  2190      26.789 -15.433  40.483  1.00 13.07
ATOM   14637  CB  TYR  2190      27.175 -15.714  41.946  1.00 12.91
ATOM   14638  CG  TYR  2190      26.689 -17.035  42.515  1.00 11.62
ATOM   14639  CD1 TYR  2190      27.524 -18.156  42.554  1.00 11.92
ATOM   14640  CE1 TYR  2190      27.087 -19.366  43.090  1.00 12.64
ATOM   14641  CD2 TYR  2190      25.396 -17.158  43.027  1.00 14.06
ATOM   14642  CE2 TYR  2190      24.944 -18.360  43.563  1.00 13.68
ATOM   14643  CZ  TYR  2190      25.793 -19.461  43.593  1.00 14.72
ATOM   14644  OH  TYR  2190      25.349 -20.652  44.128  1.00 15.24
ATOM   14645  C   TYR  2190      27.650 -16.262  39.515  1.00 14.64
ATOM   14646  O   TYR  2190      28.681 -16.822  39.887  1.00 14.18
ATOM   14647  N   ALA  2191      27.194 -16.316  38.267  1.00 13.79
ATOM   14648  CA  ALA  2191      27.843 -17.062  37.194  1.00 14.38
ATOM   14649  CB  ALA  2191      26.929 -17.077  35.976  1.00 13.74
ATOM   14650  C   ALA  2191      29.211 -16.503  36.808  1.00 13.17
ATOM   14651  O   ALA  2191      30.072 -17.240  36.331  1.00 12.13
ATOM   14652  N   THR  2192      29.382 -15.198  36.998  1.00 12.89
ATOM   14653  CA  THR  2192      30.629 -14.500  36.705  1.00 14.63
ATOM   14654  CB  THR  2192      30.560 -13.704  35.386  1.00 15.14
ATOM   14655  OG1 THR  2192      29.676 -12.583  35.546  1.00 13.87
ATOM   14656  CG2 THR  2192      30.036 -14.589  34.254  1.00 15.22
ATOM   14657  C   THR  2192      30.828 -13.495  37.835  1.00 16.27
ATOM   14658  O   THR  2192      29.873 -13.126  38.517  1.00 15.41
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ATOM    14659  N    PRO   2193      32.073 -13.042  38.053  1.00 16.19
ATOM    14660  CD   PRO   2193      33.343 -13.538  37.490  1.00 16.85
ATOM    14661  CA   PRO   2193      32.315 -12.073  39.124  1.00 16.55
ATOM    14662  CB   PRO   2193      33.803 -11.792  38.992  1.00 18.64
ATOM    14663  CG   PRO   2193      34.343 -13.133  38.552  1.00 17.11
ATOM    14664  C    PRO   2193      31.465 -10.824  38.937  1.00 15.31
ATOM    14665  O    PRO   2193      30.831 -10.354  39.876  1.00 15.59
ATOM    14666  N    GLU   2194      31.454 -10.296  37.718  1.00 16.75
ATOM    14667  CA   GLU   2194      30.687  -9.098  37.419  1.00 17.91
ATOM    14668  CB   GLU   2194      30.858  -8.711  35.948  1.00 23.31
ATOM    14669  CG   GLU   2194      32.215  -8.092  35.630  1.00 30.85
ATOM    14670  CD   GLU   2194      32.409  -7.831  34.149  1.00 35.36
ATOM    14671  OE1  GLU   2194      31.524  -7.192  33.537  1.00 39.04
ATOM    14672  OE2  GLU   2194      33.450  -8.260  33.598  1.00 39.02
ATOM    14673  C    GLU   2194      29.206  -9.245  37.757  1.00 17.81
ATOM    14674  O    GLU   2194      28.602  -8.322  38.304  1.00 17.37
ATOM    14675  N    GLN   2195      28.612 -10.390  37.435  1.00 15.20
ATOM    14676  CA   GLN   2195      27.199 -10.586  37.744  1.00 16.01
ATOM    14677  CB   GLN   2195      26.642 -11.799  36.994  1.00 17.15
ATOM    14678  CG   GLN   2195      26.551 -11.574  35.488  1.00 21.26
ATOM    14679  CD   GLN   2195      26.048 -12.795  34.750  1.00 25.19
ATOM    14680  OE1  GLN   2195      24.964 -13.304  35.038  1.00 25.51
ATOM    14681  NE2  GLN   2195      26.835 -13.273  33.787  1.00 28.35
ATOM    14682  C    GLN   2195      27.006 -10.756  39.248  1.00 14.45
ATOM    14683  O    GLN   2195      26.010 -10.300  39.798  1.00 14.86
ATOM    14684  N    ALA   2196      27.966 -11.407  39.899  1.00 12.21
ATOM    14685  CA   ALA   2196      27.908 -11.620  41.329  1.00 12.40
ATOM    14686  CB   ALA   2196      29.105 -12.455  41.795  1.00 13.23
ATOM    14687  C    ALA   2196      27.898 -10.272  42.047  1.00 11.64
ATOM    14688  O    ALA   2196      27.146 -10.072  43.010  1.00 11.62
ATOM    14689  N    PHE   2197      28.727  -9.346  41.571  1.00 11.56
ATOM    14690  CA   PHE   2197      28.809  -8.007  42.164  1.00 13.89
ATOM    14691  CB   PHE   2197      29.858  -7.146  41.442  1.00 13.21
ATOM    14692  CG   PHE   2197      31.236  -7.743  41.414  1.00 12.74
ATOM    14693  CD1  PHE   2197      31.673  -8.576  42.432  1.00 13.16
ATOM    14694  CD2  PHE   2197      32.106  -7.448  40.368  1.00 17.01
ATOM    14695  CE1  PHE   2197      32.962  -9.119  42.413  1.00 16.01
ATOM    14696  CE2  PHE   2197      33.397  -7.981  40.332  1.00 15.05
ATOM    14697  CZ   PHE   2197      33.819  -8.815  41.355  1.00 15.53
ATOM    14698  C    PHE   2197      27.469  -7.282  42.071  1.00 15.38
ATOM    14699  O    PHE   2197      26.976  -6.713  43.047  1.00 15.31
ATOM    14700  N    GLU   2198      26.900  -7.296  40.874  1.00 16.38
ATOM    14701  CA   GLU   2198      25.636  -6.629  40.619  1.00 18.38
ATOM    14702  CB   GLU   2198      25.286  -6.745  39.134  1.00 21.89
ATOM    14703  CG   GLU   2198      24.046  -5.985  38.698  1.00 28.47
ATOM    14704  CD   GLU   2198      24.133  -4.486  38.975  1.00 31.20
ATOM    14705  OE1  GLU   2198      25.253  -3.974  39.213  1.00 31.05
ATOM    14706  OE2  GLU   2198      23.074  -3.823  38.939  1.00 33.83
ATOM    14707  C    GLU   2198      24.502  -7.198  41.463  1.00 16.31
ATOM    14708  O    GLU   2198      23.748  -6.451  42.088  1.00 15.63
ATOM    14709  N    ASN   2199      24.390  -8.520  41.488  1.00 14.90
ATOM    14710  CA   ASN   2199      23.331  -9.173  42.234  1.00 15.15
ATOM    14711  CB   ASN   2199      23.176 -10.619  41.748  1.00 14.55
ATOM    14712  CG   ASN   2199      22.703 -10.687  40.306  1.00 14.12
ATOM    14713  OD1  ASN   2199      21.887  -9.869  39.880  1.00 13.06
ATOM    14714  ND2  ASN   2199      23.196 -11.666  39.551  1.00 16.16
ATOM    14715  C    ASN   2199      23.537  -9.112  43.737  1.00 13.30
ATOM    14716  O    ASN   2199      22.576  -8.971  44.494  1.00 11.68
ATOM    14717  N    ALA   2200      24.790  -9.200  44.170  1.00 13.38
ATOM    14718  CA   ALA   2200      25.106  -9.121  45.596  1.00 14.01
ATOM    14719  CB   ALA   2200      26.601  -9.377  45.819  1.00 14.48
ATOM    14720  C    ALA   2200      24.738  -7.720  46.092  1.00 12.03
ATOM    14721  O    ALA   2200      24.204  -7.558  47.189  1.00 13.32
ATOM    14722  N    ALA   2201      25.022  -6.713  45.271  1.00 13.67
ATOM    14723  CA   ALA   2201      24.716  -5.335  45.625  1.00 13.13
ATOM    14724  CB   ALA   2201      25.285  -4.370  44.573  1.00 13.81
ATOM    14725  C    ALA   2201      23.206  -5.132  45.751  1.00 13.16
ATOM    14726  O    ALA   2201      22.736  -4.435  46.645  1.00 15.03
ATOM    14727  N    THR   2202      22.446  -5.743  44.853  1.00 13.60
ATOM    14728  CA   THR   2202      20.999  -5.613  44.897  1.00 11.59
ATOM    14729  CB   THR   2202      20.353  -6.445  43.798  1.00 10.38
ATOM    14730  OG1  THR   2202      20.822  -5.973  42.537  1.00 11.16
ATOM    14731  CG2  THR   2202      18.836  -6.331  43.848  1.00 11.71
ATOM    14732  C    THR   2202      20.446  -6.068  46.244  1.00 11.76
ATOM    14733  O    THR   2202      19.665  -5.361  46.896  1.00 12.13
ATOM    14734  N    VAL   2203      20.867  -7.252  46.658  1.00 11.71
ATOM    14735  CA   VAL   2203      20.431  -7.835  47.908  1.00 14.15
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ATOM	14736	CB	VAL	2203	20.883	-9.303	47.970	1.00	17.90
ATOM	14737	CG1	VAL	2203	20.327	-9.969	49.200	1.00	22.76
ATOM	14738	CG2	VAL	2203	20.393	-10.031	46.713	1.00	21.66
ATOM	14739	C	VAL	2203	20.953	-7.062	49.116	1.00	13.49
ATOM	14740	O	VAL	2203	20.251	-6.904	50.122	1.00	11.71
ATOM	14741	N	MET	2204	22.182	-6.570	49.026	1.00	12.79
ATOM	14742	CA	MET	2204	22.743	-5.798	50.136	1.00	15.57
ATOM	14743	CB	MET	2204	24.224	-5.501	49.875	1.00	16.63
ATOM	14744	CG	MET	2204	25.104	-6.724	49.887	1.00	18.75
ATOM	14745	SD	MET	2204	25.263	-7.508	51.497	1.00	19.13
ATOM	14746	CE	MET	2204	26.337	-6.307	52.339	1.00	18.60
ATOM	14747	C	MET	2204	21.963	-4.497	50.308	1.00	14.20
ATOM	14748	O	MET	2204	21.556	-4.147	51.421	1.00	13.48
ATOM	14749	N	ARG	2205	21.739	-3.785	49.208	1.00	13.14
ATOM	14750	CA	ARG	2205	20.995	-2.527	49.284	1.00	13.16
ATOM	14751	CB	ARG	2205	20.887	-1.887	47.898	1.00	13.73
ATOM	14752	CG	ARG	2205	22.229	-1.512	47.283	1.00	15.34
ATOM	14753	CD	ARG	2205	22.044	-0.529	46.141	1.00	14.72
ATOM	14754	NE	ARG	2205	23.263	-0.355	45.349	1.00	16.85
ATOM	14755	CZ	ARG	2205	23.591	-1.101	44.299	1.00	15.47
ATOM	14756	NH1	ARG	2205	22.791	-2.083	43.900	1.00	16.64
ATOM	14757	NH2	ARG	2205	24.717	-0.857	43.642	1.00	16.81
ATOM	14758	C	ARG	2205	19.601	-2.780	49.859	1.00	15.15
ATOM	14759	O	ARG	2205	19.033	-1.919	50.530	1.00	13.24
ATOM	14760	N	ALA	2206	19.071	-3.975	49.602	1.00	13.63
ATOM	14761	CA	ALA	2206	17.750	-4.366	50.090	1.00	14.83
ATOM	14762	CB	ALA	2206	17.292	-5.649	49.393	1.00	14.81
ATOM	14763	C	ALA	2206	17.717	-4.559	51.609	1.00	15.51
ATOM	14764	O	ALA	2206	16.645	-4.607	52.209	1.00	15.01
ATOM	14765	N	GLY	2207	18.888	-4.689	52.226	1.00	14.53
ATOM	14766	CA	GLY	2207	18.933	-4.854	53.666	1.00	14.24
ATOM	14767	C	GLY	2207	19.806	-5.969	54.210	1.00	14.79
ATOM	14768	O	GLY	2207	19.965	-6.098	55.430	1.00	13.55
ATOM	14769	N	ALA	2208	20.384	-6.782	53.330	1.00	13.05
ATOM	14770	CA	ALA	2208	21.235	-7.878	53.790	1.00	13.56
ATOM	14771	CB	ALA	2208	21.478	-8.860	52.650	1.00	14.49
ATOM	14772	C	ALA	2208	22.568	-7.351	54.310	1.00	13.56
ATOM	14773	O	ALA	2208	22.982	-6.257	53.946	1.00	14.11
ATOM	14774	N	ASN	2209	23.216	-8.112	55.187	1.00	14.56
ATOM	14775	CA	ASN	2209	24.526	-7.715	55.720	1.00	16.30
ATOM	14776	CB	ASN	2209	24.596	-7.881	57.236	1.00	17.22
ATOM	14777	CG	ASN	2209	23.534	-7.107	57.964	1.00	15.22
ATOM	14778	OD1	ASN	2209	23.458	-5.884	57.868	1.00	20.45
ATOM	14779	ND2	ASN	2209	22.707	-7.821	58.711	1.00	13.67
ATOM	14780	C	ASN	2209	25.579	-8.641	55.139	1.00	16.35
ATOM	14781	O	ASN	2209	26.776	-8.360	55.194	1.00	16.50
ATOM	14782	N	MET	2210	25.113	-9.755	54.594	1.00	16.82
ATOM	14783	CA	MET	2210	25.996	-10.772	54.051	1.00	16.51
ATOM	14784	CB	MET	2210	26.474	-11.661	55.197	1.00	18.41
ATOM	14785	CG	MET	2210	27.305	-12.865	54.798	1.00	19.82
ATOM	14786	SD	MET	2210	27.830	-13.789	56.264	1.00	21.89
ATOM	14787	CE	MET	2210	29.505	-13.207	56.418	1.00	21.07
ATOM	14788	C	MET	2210	25.262	-11.605	53.015	1.00	16.91
ATOM	14789	O	MET	2210	24.049	-11.784	53.100	1.00	14.74
ATOM	14790	N	VAL	2211	26.009	-12.110	52.041	1.00	15.70
ATOM	14791	CA	VAL	2211	25.444	-12.926	50.978	1.00	16.74
ATOM	14792	CB	VAL	2211	25.795	-12.306	49.613	1.00	19.57
ATOM	14793	CG1	VAL	2211	25.664	-13.330	48.525	1.00	23.64
ATOM	14794	CG2	VAL	2211	24.890	-11.110	49.342	1.00	18.37
ATOM	14795	C	VAL	2211	25.982	-14.356	51.052	1.00	17.23
ATOM	14796	O	VAL	2211	27.151	-14.570	51.388	1.00	17.13
ATOM	14797	N	LYS	2212	25.130	-15.334	50.757	1.00	18.13
ATOM	14798	CA	LYS	2212	25.558	-16.726	50.767	1.00	17.96
ATOM	14799	CB	LYS	2212	24.650	-17.582	51.669	1.00	17.25
ATOM	14800	CG	LYS	2212	25.056	-19.051	51.721	1.00	17.85
ATOM	14801	CD	LYS	2212	24.563	-19.773	52.981	1.00	19.98
ATOM	14802	CE	LYS	2212	23.056	-19.981	52.972	1.00	20.44
ATOM	14803	NZ	LYS	2212	22.617	-20.726	51.751	1.00	19.76
ATOM	14804	C	LYS	2212	25.527	-17.254	49.339	1.00	19.04
ATOM	14805	O	LYS	2212	24.612	-16.947	48.568	1.00	18.54
ATOM	14806	N	ILE	2213	26.548	-18.028	48.983	1.00	17.52
ATOM	14807	CA	ILE	2213	26.643	-18.610	47.650	1.00	17.09
ATOM	14808	CB	ILE	2213	27.620	-17.808	46.749	1.00	17.18
ATOM	14809	CG2	ILE	2213	27.019	-16.453	46.418	1.00	19.75
ATOM	14810	CG1	ILE	2213	28.972	-17.636	47.447	1.00	20.12
ATOM	14811	CD1	ILE	2213	29.984	-16.858	46.638	1.00	18.91
ATOM	14812	C	ILE	2213	27.113	-20.053	47.763	1.00	17.08

ATOM	14813	O	ILE	2213	27.899	-20.384	48.648	1.00	17.01
ATOM	14814	N	GLU	2214	26.623	-20.908	46.868	1.00	17.34
ATOM	14815	CA	GLU	2214	26.960	-22.331	46.885	1.00	18.18
ATOM	14816	CB	GLU	2214	25.729	-23.170	46.518	1.00	19.12
ATOM	14817	CG	GLU	2214	24.448	-22.784	47.239	1.00	20.19
ATOM	14818	CD	GLU	2214	23.272	-23.676	46.855	1.00	23.23
ATOM	14819	OE1	GLU	2214	23.371	-24.392	45.835	1.00	22.32
ATOM	14820	OE2	GLU	2214	22.243	-23.657	47.563	1.00	22.19
ATOM	14821	C	GLU	2214	28.086	-22.665	45.913	1.00	18.52
ATOM	14822	O	GLU	2214	28.089	-22.200	44.775	1.00	17.83
ATOM	14823	N	GLY	2215	29.048	-23.467	46.361	1.00	19.25
ATOM	14824	CA	GLY	2215	30.148	-23.837	45.484	1.00	21.18
ATOM	14825	C	GLY	2215	31.491	-23.915	46.182	1.00	21.73
ATOM	14826	O	GLY	2215	31.679	-23.332	47.249	1.00	20.66
ATOM	14827	N	GLY	2216	32.434	-24.629	45.575	1.00	22.21
ATOM	14828	CA	GLY	2216	33.749	-24.765	46.176	1.00	21.89
ATOM	14829	C	GLY	2216	34.841	-23.888	45.590	1.00	21.57
ATOM	14830	O	GLY	2216	34.682	-22.676	45.445	1.00	22.59
ATOM	14831	N	GLU	2217	35.962	-24.524	45.266	1.00	22.40
ATOM	14832	CA	GLU	2217	37.140	-23.869	44.701	1.00	23.58
ATOM	14833	CB	GLU	2217	38.119	-24.934	44.188	1.00	26.77
ATOM	14834	CG	GLU	2217	39.116	-25.430	45.213	1.00	34.27
ATOM	14835	CD	GLU	2217	40.230	-24.431	45.458	1.00	37.56
ATOM	14836	OE1	GLU	2217	39.934	-23.296	45.880	1.00	41.29
ATOM	14837	OE2	GLU	2217	41.405	-24.777	45.223	1.00	40.20
ATOM	14838	C	GLU	2217	36.881	-22.869	43.584	1.00	20.77
ATOM	14839	O	GLU	2217	37.519	-21.817	43.531	1.00	19.61
ATOM	14840	N	TRP	2218	35.950	-23.185	42.690	1.00	19.83
ATOM	14841	CA	TRP	2218	35.678	-22.291	41.576	1.00	18.55
ATOM	14842	CB	TRP	2218	34.673	-22.922	40.603	1.00	20.02
ATOM	14843	CG	TRP	2218	33.243	-22.946	41.065	1.00	18.78
ATOM	14844	CD2	TRP	2218	32.217	-22.023	40.687	1.00	17.40
ATOM	14845	CE2	TRP	2218	31.023	-22.440	41.318	1.00	16.35
ATOM	14846	CE3	TRP	2218	32.191	-20.881	39.875	1.00	15.52
ATOM	14847	CD1	TRP	2218	32.654	-23.860	41.889	1.00	19.14
ATOM	14848	NE1	TRP	2218	31.315	-23.566	42.044	1.00	19.28
ATOM	14849	CZ2	TRP	2218	29.812	-21.753	41.161	1.00	17.53
ATOM	14850	CZ3	TRP	2218	30.985	-20.199	39.719	1.00	17.03
ATOM	14851	CH2	TRP	2218	29.812	-20.640	40.362	1.00	15.23
ATOM	14852	C	TRP	2218	35.204	-20.906	42.006	1.00	17.22
ATOM	14853	O	TRP	2218	35.307	-19.950	41.237	1.00	17.68
ATOM	14854	N	LEU	2219	34.703	-20.792	43.233	1.00	17.71
ATOM	14855	CA	LEU	2219	34.213	-19.509	43.751	1.00	18.36
ATOM	14856	CB	LEU	2219	33.130	-19.746	44.809	1.00	18.12
ATOM	14857	CG	LEU	2219	31.749	-20.160	44.306	1.00	21.23
ATOM	14858	CD1	LEU	2219	30.838	-20.464	45.498	1.00	21.25
ATOM	14859	CD2	LEU	2219	31.158	-19.035	43.455	1.00	19.14
ATOM	14860	C	LEU	2219	35.299	-18.616	44.350	1.00	19.10
ATOM	14861	O	LEU	2219	35.067	-17.432	44.601	1.00	16.47
ATOM	14862	N	VAL	2220	36.482	-19.178	44.577	1.00	18.67
ATOM	14863	CA	VAL	2220	37.586	-18.417	45.162	1.00	19.82
ATOM	14864	CB	VAL	2220	38.933	-19.139	44.930	1.00	20.78
ATOM	14865	CG1	VAL	2220	40.091	-18.231	45.324	1.00	21.55
ATOM	14866	CG2	VAL	2220	38.966	-20.415	45.742	1.00	22.40
ATOM	14867	C	VAL	2220	37.714	-16.976	44.663	1.00	18.36
ATOM	14868	O	VAL	2220	37.677	-16.045	45.457	1.00	19.22
ATOM	14869	N	GLU	2221	37.864	-16.797	43.353	1.00	17.93
ATOM	14870	CA	GLU	2221	38.010	-15.462	42.790	1.00	18.36
ATOM	14871	CB	GLU	2221	38.208	-15.543	41.281	1.00	20.61
ATOM	14872	CG	GLU	2221	38.200	-14.198	40.587	1.00	26.76
ATOM	14873	CD	GLU	2221	38.529	-14.303	39.113	1.00	30.40
ATOM	14874	OE1	GLU	2221	37.805	-15.014	38.385	1.00	30.39
ATOM	14875	OE2	GLU	2221	39.517	-13.673	38.687	1.00	33.96
ATOM	14876	C	GLU	2221	36.811	-14.567	43.091	1.00	18.56
ATOM	14877	O	GLU	2221	36.965	-13.395	43.436	1.00	16.57
ATOM	14878	N	THR	2222	35.617	-15.126	42.946	1.00	17.43
ATOM	14879	CA	THR	2222	34.397	-14.381	43.197	1.00	17.79
ATOM	14880	CB	THR	2222	33.161	-15.243	42.872	1.00	17.87
ATOM	14881	OG1	THR	2222	33.175	-15.576	41.480	1.00	19.38
ATOM	14882	CG2	THR	2222	31.882	-14.485	43.188	1.00	19.18
ATOM	14883	C	THR	2222	34.326	-13.895	44.645	1.00	16.86
ATOM	14884	O	THR	2222	33.974	-12.741	44.904	1.00	15.36
ATOM	14885	N	VAL	2223	34.681	-14.767	45.586	1.00	17.57
ATOM	14886	CA	VAL	2223	34.654	-14.412	47.003	1.00	17.48
ATOM	14887	CB	VAL	2223	34.958	-15.631	47.898	1.00	18.55
ATOM	14888	CG1	VAL	2223	34.953	-15.211	49.373	1.00	20.37
ATOM	14889	CG2	VAL	2223	33.932	-16.721	47.652	1.00	16.46

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ATOM   14890  C    VAL  2223      35.666 -13.320  47.329  1.00 19.79
ATOM   14891  O    VAL  2223      35.352 -12.349  48.024  1.00 17.16
ATOM   14892  N    GLN  2224      36.885 -13.489  46.827  1.00 18.72
ATOM   14893  CA   GLN  2224      37.940 -12.515  47.065  1.00 21.39
ATOM   14894  CB   GLN  2224      39.233 -12.925  46.346  1.00 24.26
ATOM   14895  CG   GLN  2224      39.725 -14.335  46.648  1.00 29.53
ATOM   14896  CD   GLN  2224      41.050 -14.655  45.953  1.00 33.18
ATOM   14897  OE1  GLN  2224      41.196 -14.464  44.738  1.00 33.20
ATOM   14898  NE2  GLN  2224      42.018 -15.150  46.722  1.00 32.66
ATOM   14899  C    GLN  2224      37.502 -11.148  46.554  1.00 19.64
ATOM   14900  O    GLN  2224      37.628 -10.149  47.253  1.00 19.34
ATOM   14901  N    MET  2225      36.978 -11.108  45.335  1.00 19.03
ATOM   14902  CA   MET  2225      36.552  -9.846  44.744  1.00 18.40
ATOM   14903  CB   MET  2225      36.306 -10.026  43.249  1.00 18.27
ATOM   14904  CG   MET  2225      37.591 -10.324  42.483  1.00 22.00
ATOM   14905  SD   MET  2225      37.353 -10.429  40.706  1.00 21.95
ATOM   14906  CE   MET  2225      37.447  -8.712  40.259  1.00 20.84
ATOM   14907  C    MET  2225      35.334  -9.226  45.415  1.00 17.69
ATOM   14908  O    MET  2225      35.232  -8.003  45.519  1.00 16.95
ATOM   14909  N    LEU  2226      34.411 -10.063  45.866  1.00 17.48
ATOM   14910  CA   LEU  2226      33.228  -9.557  46.547  1.00 17.32
ATOM   14911  CB   LEU  2226      32.245 -10.689  46.819  1.00 16.18
ATOM   14912  CG   LEU  2226      31.283 -11.057  45.681  1.00 14.70
ATOM   14913  CD1  LEU  2226      30.554 -12.330  46.056  1.00 10.61
ATOM   14914  CD2  LEU  2226      30.287  -9.923  45.438  1.00 15.10
ATOM   14915  C    LEU  2226      33.622  -8.897  47.864  1.00 17.88
ATOM   14916  O    LEU  2226      33.203  -7.777  48.158  1.00 16.44
ATOM   14917  N    THR  2227      34.429  -9.601  48.650  1.00 20.52
ATOM   14918  CA   THR  2227      34.889  -9.099  49.946  1.00 24.25
ATOM   14919  CB   THR  2227      35.886 -10.078  50.593  1.00 25.62
ATOM   14920  OG1  THR  2227      35.234 -11.334  50.830  1.00 29.56
ATOM   14921  CG2  THR  2227      36.391  -9.524  51.925  1.00 31.43
ATOM   14922  C    THR  2227      35.543  -7.721  49.851  1.00 24.33
ATOM   14923  O    THR  2227      35.235  -6.825  50.643  1.00 25.20
ATOM   14924  N    GLU  2228      36.447  -7.546  48.892  1.00 25.76
ATOM   14925  CA   GLU  2228      37.114  -6.259  48.737  1.00 26.35
ATOM   14926  CB   GLU  2228      38.353  -6.391  47.838  1.00 30.63
ATOM   14927  CG   GLU  2228      38.203  -7.358  46.687  1.00 31.85
ATOM   14928  CD   GLU  2228      39.465  -7.474  45.846  1.00 33.25
ATOM   14929  OE1  GLU  2228      40.557  -7.670  46.422  1.00 35.06
ATOM   14930  OE2  GLU  2228      39.368  -7.385  44.607  1.00 28.52
ATOM   14931  C    GLU  2228      36.160  -5.202  48.190  1.00 26.51
ATOM   14932  O    GLU  2228      36.475  -4.013  48.176  1.00 26.37
ATOM   14933  N    ARG  2229      34.983  -5.632  47.747  1.00 23.68
ATOM   14934  CA   ARG  2229      34.004  -4.690  47.228  1.00 22.45
ATOM   14935  CB   ARG  2229      33.456  -5.199  45.893  1.00 21.74
ATOM   14936  CG   ARG  2229      34.481  -5.021  44.779  1.00 21.55
ATOM   14937  CD   ARG  2229      34.202  -5.839  43.529  1.00 19.25
ATOM   14938  NE   ARG  2229      35.257  -5.628  42.538  1.00 16.72
ATOM   14939  CZ   ARG  2229      36.528  -5.998  42.696  1.00 14.29
ATOM   14940  NH1  ARG  2229      36.918  -6.607  43.804  1.00 14.68
ATOM   14941  NH2  ARG  2229      37.421  -5.745  41.748  1.00 16.15
ATOM   14942  C    ARG  2229      32.894  -4.421  48.244  1.00 20.95
ATOM   14943  O    ARG  2229      31.753  -4.099  47.889  1.00 21.04
ATOM   14944  N    ALA  2230      33.254  -4.570  49.517  1.00 19.92
ATOM   14945  CA   ALA  2230      32.362  -4.309  50.646  1.00 17.61
ATOM   14946  CB   ALA  2230      31.750  -2.915  50.500  1.00 20.44
ATOM   14947  C    ALA  2230      31.265  -5.336  50.912  1.00 18.57
ATOM   14948  O    ALA  2230      30.374  -5.085  51.722  1.00 17.70
ATOM   14949  N    VAL  2231      31.335  -6.493  50.254  1.00 17.15
ATOM   14950  CA   VAL  2231      30.324  -7.534  50.444  1.00 17.76
ATOM   14951  CB   VAL  2231      29.729  -8.000  49.083  1.00 17.93
ATOM   14952  CG1  VAL  2231      28.669  -9.075  49.316  1.00 17.35
ATOM   14953  CG2  VAL  2231      29.125  -6.822  48.335  1.00 17.32
ATOM   14954  C    VAL  2231      30.824  -8.783  51.183  1.00 17.83
ATOM   14955  O    VAL  2231      31.576  -9.582  50.623  1.00 18.81
ATOM   14956  N    PRO  2232      30.412  -8.969  52.450  1.00 16.77
ATOM   14957  CD   PRO  2232      29.701  -8.061  53.370  1.00 17.78
ATOM   14958  CA   PRO  2232      30.884 -10.168  53.145  1.00 16.29
ATOM   14959  CB   PRO  2232      30.523  -9.898  54.608  1.00 18.07
ATOM   14960  CG   PRO  2232      29.390  -8.958  54.529  1.00 18.75
ATOM   14961  C    PRO  2232      30.191 -11.391  52.557  1.00 15.35
ATOM   14962  O    PRO  2232      29.048 -11.309  52.093  1.00 15.40
ATOM   14963  N    VAL  2233      30.887 -12.520  52.576  1.00 16.70
ATOM   14964  CA   VAL  2233      30.365 -13.753  51.995  1.00 15.99
ATOM   14965  CB   VAL  2233      31.225 -14.174  50.772  1.00 17.33
ATOM   14966  CG1  VAL  2233      30.743 -15.516  50.231  1.00 15.74
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ATOM	14967	CG2	VAL	2233	31.189	-13.105	49.708	1.00	16.38
ATOM	14968	C	VAL	2233	30.316	-14.958	52.924	1.00	16.80
ATOM	14969	O	VAL	2233	31.250	-15.224	53.681	1.00	16.97
ATOM	14970	N	CYS	2234	29.217	-15.695	52.838	1.00	15.58
ATOM	14971	CA	CYS	2234	29.055	-16.917	53.599	1.00	16.50
ATOM	14972	CB	CYS	2234	27.683	-16.974	54.281	1.00	15.73
ATOM	14973	SG	CYS	2234	27.369	-18.518	55.159	1.00	16.61
ATOM	14974	C	CYS	2234	29.140	-18.027	52.552	1.00	18.28
ATOM	14975	O	CYS	2234	28.428	-17.992	51.544	1.00	19.80
ATOM	14976	N	GLY	2235	30.027	-18.990	52.775	1.00	17.80
ATOM	14977	CA	GLY	2235	30.162	-20.093	51.841	1.00	17.79
ATOM	14978	C	GLY	2235	29.081	-21.125	52.090	1.00	16.39
ATOM	14979	O	GLY	2235	28.330	-21.021	53.060	1.00	16.55
ATOM	14980	N	HIS	2236	28.989	-22.123	51.219	1.00	16.49
ATOM	14981	CA	HIS	2236	27.981	-23.169	51.378	1.00	19.27
ATOM	14982	CB	HIS	2236	26.646	-22.690	50.790	1.00	19.17
ATOM	14983	CG	HIS	2236	25.489	-23.600	51.058	1.00	20.45
ATOM	14984	CD2	HIS	2236	25.434	-24.925	51.334	1.00	21.15
ATOM	14985	ND1	HIS	2236	24.182	-23.163	51.018	1.00	20.57
ATOM	14986	CE1	HIS	2236	23.372	-24.178	51.258	1.00	20.23
ATOM	14987	NE2	HIS	2236	24.107	-25.260	51.454	1.00	19.86
ATOM	14988	C	HIS	2236	28.480	-24.420	50.667	1.00	19.78
ATOM	14989	O	HIS	2236	28.538	-24.463	49.438	1.00	18.95
ATOM	14990	N	LEU	2237	28.849	-25.427	51.455	1.00	21.72
ATOM	14991	CA	LEU	2237	29.375	-26.686	50.926	1.00	22.90
ATOM	14992	CB	LEU	2237	30.823	-26.880	51.383	1.00	21.03
ATOM	14993	CG	LEU	2237	31.850	-25.837	50.920	1.00	21.00
ATOM	14994	CD1	LEU	2237	33.206	-26.144	51.536	1.00	20.20
ATOM	14995	CD2	LEU	2237	31.942	-25.844	49.401	1.00	22.91
ATOM	14996	C	LEU	2237	28.542	-27.881	51.365	1.00	22.62
ATOM	14997	O	LEU	2237	27.701	-27.768	52.256	1.00	22.68
ATOM	14998	N	GLY	2238	28.793	-29.028	50.739	1.00	23.03
ATOM	14999	CA	GLY	2238	28.052	-30.235	51.061	1.00	22.71
ATOM	15000	C	GLY	2238	26.899	-30.398	50.096	1.00	24.92
ATOM	15001	O	GLY	2238	27.094	-30.367	48.880	1.00	24.62
ATOM	15002	N	LEU	2239	25.694	-30.565	50.631	1.00	25.75
ATOM	15003	CA	LEU	2239	24.506	-30.715	49.801	1.00	27.14
ATOM	15004	CB	LEU	2239	23.427	-31.485	50.573	1.00	27.64
ATOM	15005	CG	LEU	2239	22.208	-32.031	49.822	1.00	29.36
ATOM	15006	CD1	LEU	2239	21.373	-32.870	50.782	1.00	29.18
ATOM	15007	CD2	LEU	2239	21.380	-30.905	49.248	1.00	29.54
ATOM	15008	C	LEU	2239	23.996	-29.323	49.416	1.00	27.73
ATOM	15009	O	LEU	2239	23.270	-28.681	50.181	1.00	29.81
ATOM	15010	N	THR	2240	24.391	-28.866	48.231	1.00	24.58
ATOM	15011	CA	THR	2240	23.998	-27.559	47.714	1.00	24.57
ATOM	15012	CB	THR	2240	25.156	-26.932	46.894	1.00	25.13
ATOM	15013	OG1	THR	2240	25.600	-27.858	45.890	1.00	23.49
ATOM	15014	CG2	THR	2240	26.336	-26.607	47.810	1.00	26.36
ATOM	15015	C	THR	2240	22.751	-27.721	46.840	1.00	24.62
ATOM	15016	O	THR	2240	22.843	-28.055	45.661	1.00	23.83
ATOM	15017	N	PRO	2241	21.565	-27.473	47.420	1.00	24.68
ATOM	15018	CD	PRO	2241	21.400	-26.858	48.749	1.00	25.30
ATOM	15019	CA	PRO	2241	20.267	-27.592	46.741	1.00	24.86
ATOM	15020	CB	PRO	2241	19.283	-27.004	47.758	1.00	24.84
ATOM	15021	CG	PRO	2241	20.136	-26.080	48.575	1.00	27.84
ATOM	15022	C	PRO	2241	20.112	-27.002	45.337	1.00	24.57
ATOM	15023	O	PRO	2241	19.338	-27.530	44.534	1.00	24.58
ATOM	15024	N	GLN	2242	20.828	-25.924	45.026	1.00	22.22
ATOM	15025	CA	GLN	2242	20.737	-25.335	43.687	1.00	22.19
ATOM	15026	CB	GLN	2242	21.591	-24.064	43.599	1.00	21.42
ATOM	15027	CG	GLN	2242	20.849	-22.785	43.987	1.00	19.29
ATOM	15028	CD	GLN	2242	21.784	-21.601	44.191	1.00	20.80
ATOM	15029	OE1	GLN	2242	22.795	-21.460	43.498	1.00	18.83
ATOM	15030	NE2	GLN	2242	21.441	-20.736	45.140	1.00	17.73
ATOM	15031	C	GLN	2242	21.169	-26.331	42.602	1.00	21.96
ATOM	15032	O	GLN	2242	20.690	-26.261	41.470	1.00	20.71
ATOM	15033	N	SER	2243	22.057	-27.259	42.962	1.00	20.88
ATOM	15034	CA	SER	2243	22.553	-28.271	42.032	1.00	20.30
ATOM	15035	CB	SER	2243	24.043	-28.559	42.293	1.00	20.51
ATOM	15036	OG	SER	2243	24.851	-27.405	42.099	1.00	18.03
ATOM	15037	C	SER	2243	21.772	-29.587	42.140	1.00	20.10
ATOM	15038	O	SER	2243	22.281	-30.647	41.764	1.00	19.42
ATOM	15039	N	VAL	2244	20.538	-29.519	42.633	1.00	20.27
ATOM	15040	CA	VAL	2244	19.710	-30.712	42.806	1.00	19.69
ATOM	15041	CB	VAL	2244	18.285	-30.340	43.313	1.00	20.85
ATOM	15042	CG1	VAL	2244	17.525	-29.559	42.245	1.00	19.91
ATOM	15043	CG2	VAL	2244	17.525	-31.601	43.698	1.00	21.83

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ATOM   15044  C   VAL  2244     19.581 -31.558  41.538  1.00 20.01
ATOM   15045  O   VAL  2244     19.484 -32.785  41.611  1.00 19.12
ATOM   15046  N   ASN  2245     19.582 -30.907  40.379  1.00 17.97
ATOM   15047  CA  ASN  2245     19.471 -31.626  39.118  1.00 19.30
ATOM   15048  CB  ASN  2245     19.110 -30.653  37.993  1.00 17.46
ATOM   15049  CG  ASN  2245     17.709 -30.102  38.146  1.00 19.80
ATOM   15050  OD1 ASN  2245     16.727 -30.850  38.058  1.00 16.40
ATOM   15051  ND2 ASN  2245     17.601 -28.796  38.386  1.00 18.40
ATOM   15052  C   ASN  2245     20.756 -32.367  38.787  1.00 19.89
ATOM   15053  O   ASN  2245     20.734 -33.401  38.114  1.00 20.19
ATOM   15054  N   ILE  2246     21.881 -31.835  39.254  1.00 20.52
ATOM   15055  CA  ILE  2246     23.172 -32.482  39.011  1.00 21.49
ATOM   15056  CB  ILE  2246     24.365 -31.581  39.411  1.00 20.68
ATOM   15057  CG2 ILE  2246     25.654 -32.401  39.365  1.00 21.13
ATOM   15058  CG1 ILE  2246     24.464 -30.365  38.472  1.00 20.19
ATOM   15059  CD1 ILE  2246     25.006 -30.675  37.085  1.00 18.99
ATOM   15060  C   ILE  2246     23.266 -33.759  39.847  1.00 22.01
ATOM   15061  O   ILE  2246     23.619 -34.821  39.333  1.00 21.51
ATOM   15062  N   PHE  2247     22.953 -33.647  41.136  1.00 22.01
ATOM   15063  CA  PHE  2247     23.028 -34.796  42.036  1.00 24.57
ATOM   15064  CB  PHE  2247     22.955 -34.351  43.498  1.00 27.03
ATOM   15065  CG  PHE  2247     23.907 -33.243  43.852  1.00 30.51
ATOM   15066  CD1 PHE  2247     25.256 -33.328  43.522  1.00 31.67
ATOM   15067  CD2 PHE  2247     23.449 -32.113  44.530  1.00 32.37
ATOM   15068  CE1 PHE  2247     26.139 -32.302  43.860  1.00 33.67
ATOM   15069  CE2 PHE  2247     24.320 -31.082  44.873  1.00 34.16
ATOM   15070  CZ  PHE  2247     25.667 -31.174  44.538  1.00 34.12
ATOM   15071  C   PHE  2247     21.915 -35.806  41.779  1.00 24.16
ATOM   15072  O   PHE  2247     22.042 -36.975  42.136  1.00 25.60
ATOM   15073  N   GLY  2248     20.828 -35.349  41.166  1.00 22.84
ATOM   15074  CA  GLY  2248     19.712 -36.233  40.893  1.00 23.98
ATOM   15075  C   GLY  2248     18.818 -36.384  42.107  1.00 25.53
ATOM   15076  O   GLY  2248     18.079 -37.362  42.238  1.00 25.77
ATOM   15077  N   GLY  2249     18.884 -35.405  43.002  1.00 26.74
ATOM   15078  CA  GLY  2249     18.081 -35.442  44.209  1.00 29.60
ATOM   15079  C   GLY  2249     18.844 -34.872  45.387  1.00 31.46
ATOM   15080  O   GLY  2249     19.994 -34.452  45.241  1.00 31.11
ATOM   15081  N   TYR  2250     18.207 -34.848  46.553  1.00 33.81
ATOM   15082  CA  TYR  2250     18.843 -34.330  47.758  1.00 36.66
ATOM   15083  CB  TYR  2250     17.819 -33.608  48.638  1.00 38.09
ATOM   15084  CG  TYR  2250     17.136 -32.453  47.945  1.00 40.93
ATOM   15085  CD1 TYR  2250     15.946 -32.640  47.243  1.00 41.37
ATOM   15086  CE1 TYR  2250     15.325 -31.580  46.584  1.00 43.82
ATOM   15087  CD2 TYR  2250     17.694 -31.174  47.970  1.00 41.83
ATOM   15088  CE2 TYR  2250     17.086 -30.108  47.314  1.00 43.92
ATOM   15089  CZ  TYR  2250     15.902 -30.317  46.624  1.00 43.98
ATOM   15090  OH  TYR  2250     15.303 -29.264  45.971  1.00 45.48
ATOM   15091  C   TYR  2250     19.484 -35.477  48.528  1.00 37.32
ATOM   15092  O   TYR  2250     18.859 -36.090  49.392  1.00 38.37
ATOM   15093  N   LYS  2251     20.741 -35.755  48.204  1.00 37.64
ATOM   15094  CA  LYS  2251     21.481 -36.839  48.830  1.00 37.41
ATOM   15095  CB  LYS  2251     22.013 -37.776  47.742  1.00 37.65
ATOM   15096  CG  LYS  2251     20.954 -38.168  46.711  1.00 37.38
ATOM   15097  CD  LYS  2251     21.580 -38.742  45.448  1.00 37.94
ATOM   15098  CE  LYS  2251     20.519 -39.094  44.415  1.00 37.48
ATOM   15099  NZ  LYS  2251     21.114 -39.517  43.119  1.00 33.97
ATOM   15100  C   LYS  2251     22.638 -36.287  49.659  1.00 37.97
ATOM   15101  O   LYS  2251     23.176 -35.221  49.358  1.00 36.96
ATOM   15102  N   VAL  2252     23.012 -37.018  50.706  1.00 37.82
ATOM   15103  CA  VAL  2252     24.106 -36.605  51.576  1.00 39.23
ATOM   15104  CB  VAL  2252     24.319 -37.621  52.717  1.00 38.53
ATOM   15105  CG1 VAL  2252     25.416 -37.137  53.651  1.00 39.17
ATOM   15106  CG2 VAL  2252     23.024 -37.821  53.479  1.00 39.33
ATOM   15107  C   VAL  2252     25.390 -36.497  50.759  1.00 39.59
ATOM   15108  O   VAL  2252     25.584 -37.240  49.798  1.00 39.94
ATOM   15109  N   GLN  2253     26.265 -35.574  51.144  1.00 40.19
ATOM   15110  CA  GLN  2253     27.520 -35.376  50.430  1.00 41.92
ATOM   15111  CB  GLN  2253     27.512 -34.008  49.743  1.00 42.02
ATOM   15112  CG  GLN  2253     28.197 -33.976  48.384  1.00 43.44
ATOM   15113  CD  GLN  2253     27.479 -34.825  47.349  1.00 42.91
ATOM   15114  OE1 GLN  2253     26.275 -34.672  47.128  1.00 43.91
ATOM   15115  NE2 GLN  2253     28.216 -35.723  46.704  1.00 44.45
ATOM   15116  C   GLN  2253     28.697 -35.469  51.398  1.00 42.35
ATOM   15117  O   GLN  2253     28.522 -35.358  52.610  1.00 42.17
ATOM   15118  N   GLY  2254     29.895 -35.677  50.862  1.00 43.70
ATOM   15119  CA  GLY  2254     31.069 -35.779  51.709  1.00 45.07
ATOM   15120  C   GLY  2254     31.432 -37.209  52.071  1.00 46.95
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ATOM   15121  O    GLY  2254      32.521 -37.466  52.581  1.00 47.08
ATOM   15122  N    ARG  2255      30.517 -38.140  51.814  1.00 48.47
ATOM   15123  CA   ARG  2255      30.742 -39.552  52.105  1.00 49.93
ATOM   15124  CB   ARG  2255      29.517 -40.378  51.696  1.00 50.98
ATOM   15125  CG   ARG  2255      28.224 -40.026  52.424  1.00 51.85
ATOM   15126  CD   ARG  2255      28.282 -40.425  53.887  1.00 52.47
ATOM   15127  NE   ARG  2255      27.032 -40.148  54.596  1.00 53.65
ATOM   15128  CZ   ARG  2255      25.864 -40.724  54.322  1.00 52.93
ATOM   15129  NH1  ARG  2255      25.768 -41.618  53.349  1.00 52.83
ATOM   15130  NH2  ARG  2255      24.786 -40.409  55.027  1.00 53.44
ATOM   15131  C    ARG  2255      31.966 -40.058  51.342  1.00 50.92
ATOM   15132  O    ARG  2255      31.965 -40.097  50.111  1.00 50.96
ATOM   15133  N    GLY  2256      33.010 -40.444  52.070  1.00 51.41
ATOM   15134  CA   GLY  2256      34.211 -40.938  51.419  1.00 52.44
ATOM   15135  C    GLY  2256      35.428 -40.069  51.677  1.00 52.97
ATOM   15136  O    GLY  2256      35.313 -38.854  51.819  1.00 52.71
ATOM   15137  N    ASP  2257      36.599 -40.694  51.732  1.00 53.48
ATOM   15138  CA   ASP  2257      37.838 -39.969  51.982  1.00 53.79
ATOM   15139  CB   ASP  2257      39.023 -40.934  52.009  1.00 55.06
ATOM   15140  CG   ASP  2257      38.901 -41.970  53.105  1.00 56.30
ATOM   15141  OD1  ASP  2257      38.722 -41.576  54.277  1.00 56.85
ATOM   15142  OD2  ASP  2257      38.987 -43.177  52.797  1.00 58.02
ATOM   15143  C    ASP  2257      38.084 -38.893  50.935  1.00 53.11
ATOM   15144  O    ASP  2257      38.356 -37.741  51.269  1.00 53.00
ATOM   15145  N    GLU  2258      37.989 -39.273  49.666  1.00 52.48
ATOM   15146  CA   GLU  2258      38.213 -38.335  48.576  1.00 51.39
ATOM   15147  CB   GLU  2258      38.123 -39.062  47.234  1.00 53.26
ATOM   15148  CG   GLU  2258      38.351 -38.169  46.028  1.00 55.82
ATOM   15149  CD   GLU  2258      38.623 -38.959  44.762  1.00 57.62
ATOM   15150  OE1  GLU  2258      39.678 -39.629  44.695  1.00 58.68
ATOM   15151  OE2  GLU  2258      37.783 -38.913  43.837  1.00 58.41
ATOM   15152  C    GLU  2258      37.210 -37.188  48.620  1.00 49.36
ATOM   15153  O    GLU  2258      37.591 -36.020  48.567  1.00 48.74
ATOM   15154  N    ALA  2259      35.929 -37.527  48.721  1.00 47.48
ATOM   15155  CA   ALA  2259      34.877 -36.521  48.778  1.00 45.65
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ATOM   15157  C    ALA  2259      35.023 -35.688  50.046  1.00 43.78
ATOM   15158  O    ALA  2259      34.742 -34.491  50.047  1.00 43.87
ATOM   15159  N    GLY  2260      35.466 -36.330  51.121  1.00 42.56
ATOM   15160  CA   GLY  2260      35.644 -35.632  52.380  1.00 41.13
ATOM   15161  C    GLY  2260      36.794 -34.645  52.338  1.00 40.59
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ATOM   15163  N    ASP  2261      37.909 -35.056  51.744  1.00 38.76
ATOM   15164  CA   ASP  2261      39.070 -34.182  51.647  1.00 38.24
ATOM   15165  CB   ASP  2261      40.291 -34.959  51.141  1.00 39.33
ATOM   15166  CG   ASP  2261      40.635 -36.142  52.025  1.00 40.38
ATOM   15167  OD1  ASP  2261      40.613 -35.990  53.267  1.00 39.92
ATOM   15168  OD2  ASP  2261      40.938 -37.224  51.477  1.00 42.70
ATOM   15169  C    ASP  2261      38.775 -33.022  50.707  1.00 36.18
ATOM   15170  O    ASP  2261      39.279 -31.915  50.899  1.00 35.73
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ATOM   15172  CA   GLN  2262      37.588 -32.246  48.728  1.00 34.77
ATOM   15173  CB   GLN  2262      36.718 -32.844  47.617  1.00 35.12
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ATOM   15175  CD   GLN  2262      37.568 -31.284  45.803  1.00 38.05
ATOM   15176  OE1  GLN  2262      38.409 -32.019  45.281  1.00 39.24
ATOM   15177  NE2  GLN  2262      37.665 -29.960  45.782  1.00 38.19
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ATOM   15179  O    GLN  2262      37.118 -29.939  49.177  1.00 33.28
ATOM   15180  N    LEU  2263      35.888 -31.469  50.284  1.00 32.83
ATOM   15181  CA   LEU  2263      35.105 -30.478  51.020  1.00 31.73
ATOM   15182  CB   LEU  2263      33.968 -31.153  51.796  1.00 32.63
ATOM   15183  CG   LEU  2263      32.813 -31.739  50.973  1.00 35.13
ATOM   15184  CD1  LEU  2263      31.733 -32.282  51.905  1.00 36.24
ATOM   15185  CD2  LEU  2263      32.230 -30.652  50.073  1.00 35.79
ATOM   15186  C    LEU  2263      35.993 -29.701  51.986  1.00 30.80
ATOM   15187  O    LEU  2263      35.874 -28.484  52.110  1.00 30.26
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ATOM   15189  CA   LEU  2264      37.789 -29.762  53.613  1.00 28.33
ATOM   15190  CB   LEU  2264      38.704 -30.804  54.259  1.00 31.47
ATOM   15191  CG   LEU  2264      39.283 -30.483  55.639  1.00 33.11
ATOM   15192  CD1  LEU  2264      40.170 -31.648  56.068  1.00 32.67
ATOM   15193  CD2  LEU  2264      40.069 -29.188  55.623  1.00 33.38
ATOM   15194  C    LEU  2264      38.631 -28.742  52.855  1.00 26.63
ATOM   15195  O    LEU  2264      38.761 -27.594  53.275  1.00 26.53
ATOM   15196  N    SER  2265      39.198 -29.170  51.732  1.00 25.34
ATOM   15197  CA   SER  2265      40.029 -28.291  50.918  1.00 25.06
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ATOM	15198	CB	SER	2265	40.546	-29.036	49.686	1.00	25.94
ATOM	15199	OG	SER	2265	41.362	-28.193	48.895	1.00	26.74
ATOM	15200	C	SER	2265	39.237	-27.067	50.475	1.00	24.21
ATOM	15201	O	SER	2265	39.740	-25.945	50.524	1.00	22.95
ATOM	15202	N	ASP	2266	37.998	-27.296	50.044	1.00	23.92
ATOM	15203	CA	ASP	2266	37.124	-26.215	49.594	1.00	24.88
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ATOM	15205	CG	ASP	2266	35.959	-27.401	47.671	1.00	29.42
ATOM	15206	OD1	ASP	2266	36.533	-26.744	46.775	1.00	31.95
ATOM	15207	OD2	ASP	2266	35.498	-28.545	47.478	1.00	34.49
ATOM	15208	C	ASP	2266	36.827	-25.231	50.724	1.00	22.16
ATOM	15209	O	ASP	2266	36.865	-24.013	50.529	1.00	22.29
ATOM	15210	N	ALA	2267	36.531	-25.767	51.902	1.00	22.20
ATOM	15211	CA	ALA	2267	36.237	-24.944	53.069	1.00	20.33
ATOM	15212	CB	ALA	2267	35.952	-25.836	54.280	1.00	19.05
ATOM	15213	C	ALA	2267	37.419	-24.021	53.354	1.00	20.70
ATOM	15214	O	ALA	2267	37.247	-22.817	53.546	1.00	18.09
ATOM	15215	N	LEU	2268	38.622	-24.584	53.378	1.00	19.57
ATOM	15216	CA	LEU	2268	39.812	-23.781	53.629	1.00	22.22
ATOM	15217	CB	LEU	2268	41.054	-24.671	53.712	1.00	22.33
ATOM	15218	CG	LEU	2268	41.220	-25.470	54.997	1.00	23.44
ATOM	15219	CD1	LEU	2268	42.400	-26.428	54.850	1.00	24.11
ATOM	15220	CD2	LEU	2268	41.430	-24.519	56.173	1.00	23.26
ATOM	15221	C	LEU	2268	40.016	-22.736	52.544	1.00	21.76
ATOM	15222	O	LEU	2268	40.387	-21.600	52.837	1.00	23.46
ATOM	15223	N	ALA	2269	39.772	-23.120	51.295	1.00	21.45
ATOM	15224	CA	ALA	2269	39.944	-22.204	50.174	1.00	22.17
ATOM	15225	CB	ALA	2269	39.709	-22.938	48.853	1.00	22.22
ATOM	15226	C	ALA	2269	39.000	-21.015	50.283	1.00	21.51
ATOM	15227	O	ALA	2269	39.399	-19.871	50.061	1.00	21.07
ATOM	15228	N	LEU	2270	37.745	-21.285	50.620	1.00	19.82
ATOM	15229	CA	LEU	2270	36.761	-20.215	50.753	1.00	21.19
ATOM	15230	CB	LEU	2270	35.377	-20.804	51.028	1.00	19.10
ATOM	15231	CG	LEU	2270	34.777	-21.647	49.897	1.00	20.93
ATOM	15232	CD1	LEU	2270	33.488	-22.306	50.382	1.00	20.19
ATOM	15233	CD2	LEU	2270	34.509	-20.763	48.682	1.00	20.41
ATOM	15234	C	LEU	2270	37.162	-19.269	51.882	1.00	20.84
ATOM	15235	O	LEU	2270	37.037	-18.050	51.761	1.00	21.29
ATOM	15236	N	GLU	2271	37.644	-19.834	52.982	1.00	22.99
ATOM	15237	CA	GLU	2271	38.072	-19.022	54.111	1.00	22.49
ATOM	15238	CB	GLU	2271	38.484	-19.919	55.277	1.00	23.48
ATOM	15239	CG	GLU	2271	39.110	-19.168	56.431	1.00	24.86
ATOM	15240	CD	GLU	2271	39.540	-20.086	57.555	1.00	27.13
ATOM	15241	OE1	GLU	2271	40.279	-21.059	57.280	1.00	26.64
ATOM	15242	OE2	GLU	2271	39.143	-19.831	58.710	1.00	25.55
ATOM	15243	C	GLU	2271	39.241	-18.132	53.704	1.00	22.11
ATOM	15244	O	GLU	2271	39.270	-16.943	54.018	1.00	22.92
ATOM	15245	N	ALA	2272	40.205	-18.703	52.992	1.00	23.39
ATOM	15246	CA	ALA	2272	41.370	-17.938	52.558	1.00	23.06
ATOM	15247	CB	ALA	2272	42.409	-18.878	51.946	1.00	23.50
ATOM	15248	C	ALA	2272	40.978	-16.855	51.557	1.00	23.55
ATOM	15249	O	ALA	2272	41.648	-15.826	51.455	1.00	23.19
ATOM	15250	N	ALA	2273	39.893	-17.091	50.821	1.00	23.38
ATOM	15251	CA	ALA	2273	39.413	-16.135	49.826	1.00	22.05
ATOM	15252	CB	ALA	2273	38.442	-16.824	48.864	1.00	21.44
ATOM	15253	C	ALA	2273	38.734	-14.935	50.481	1.00	21.79
ATOM	15254	O	ALA	2273	38.515	-13.908	49.839	1.00	21.90
ATOM	15255	N	GLY	2274	38.390	-15.066	51.758	1.00	21.57
ATOM	15256	CA	GLY	2274	37.747	-13.961	52.445	1.00	21.55
ATOM	15257	C	GLY	2274	36.399	-14.262	53.078	1.00	21.17
ATOM	15258	O	GLY	2274	35.818	-13.392	53.725	1.00	21.65
ATOM	15259	N	ALA	2275	35.885	-15.475	52.898	1.00	22.32
ATOM	15260	CA	ALA	2275	34.596	-15.831	53.489	1.00	20.83
ATOM	15261	CB	ALA	2275	34.218	-17.257	53.107	1.00	22.14
ATOM	15262	C	ALA	2275	34.673	-15.698	55.010	1.00	21.17
ATOM	15263	O	ALA	2275	35.616	-16.184	55.634	1.00	20.62
ATOM	15264	N	GLN	2276	33.684	-15.039	55.604	1.00	21.24
ATOM	15265	CA	GLN	2276	33.667	-14.850	57.051	1.00	21.02
ATOM	15266	CB	GLN	2276	33.293	-13.402	57.378	1.00	22.86
ATOM	15267	CG	GLN	2276	34.297	-12.396	56.843	1.00	24.47
ATOM	15268	CD	GLN	2276	33.899	-10.954	57.096	1.00	27.97
ATOM	15269	OE1	GLN	2276	34.022	-10.441	58.212	1.00	29.78
ATOM	15270	NE2	GLN	2276	33.418	-10.292	56.055	1.00	27.80
ATOM	15271	C	GLN	2276	32.721	-15.817	57.752	1.00	20.18
ATOM	15272	O	GLN	2276	32.606	-15.819	58.978	1.00	18.91
ATOM	15273	N	LEU	2277	32.048	-16.645	56.961	1.00	18.68
ATOM	15274	CA	LEU	2277	31.113	-17.638	57.480	1.00	19.05

ATOM	15275	CB	LEU	2277	29.735	-17.009	57.677	1.00	21.48
ATOM	15276	CG	LEU	2277	29.290	-16.728	59.113	1.00	23.83
ATOM	15277	CD1	LEU	2277	27.983	-15.939	59.098	1.00	24.53
ATOM	15278	CD2	LEU	2277	29.105	-18.040	59.848	1.00	26.07
ATOM	15279	C	LEU	2277	30.996	-18.787	56.485	1.00	18.50
ATOM	15280	O	LEU	2277	31.197	-18.591	55.291	1.00	19.06
ATOM	15281	N	LEU	2278	30.669	-19.978	56.978	1.00	19.37
ATOM	15282	CA	LEU	2278	30.511	-21.141	56.114	1.00	20.54
ATOM	15283	CB	LEU	2278	31.795	-21.980	56.080	1.00	21.74
ATOM	15284	CG	LEU	2278	31.702	-23.321	55.329	1.00	23.36
ATOM	15285	CD1	LEU	2278	31.185	-23.110	53.910	1.00	21.69
ATOM	15286	CD2	LEU	2278	33.070	-23.977	55.307	1.00	23.09
ATOM	15287	C	LEU	2278	29.367	-22.036	56.560	1.00	20.51
ATOM	15288	O	LEU	2278	29.232	-22.346	57.746	1.00	19.68
ATOM	15289	N	VAL	2279	28.541	-22.451	55.607	1.00	19.72
ATOM	15290	CA	VAL	2279	27.431	-23.340	55.909	1.00	20.12
ATOM	15291	CB	VAL	2279	26.098	-22.829	55.295	1.00	19.59
ATOM	15292	CG1	VAL	2279	25.043	-23.929	55.348	1.00	21.46
ATOM	15293	CG2	VAL	2279	25.599	-21.615	56.063	1.00	17.21
ATOM	15294	C	VAL	2279	27.725	-24.731	55.354	1.00	19.77
ATOM	15295	O	VAL	2279	28.143	-24.878	54.202	1.00	20.28
ATOM	15296	N	LEU	2280	27.527	-25.744	56.191	1.00	18.40
ATOM	15297	CA	LEU	2280	27.727	-27.133	55.787	1.00	19.76
ATOM	15298	CB	LEU	2280	28.710	-27.847	56.717	1.00	21.85
ATOM	15299	CG	LEU	2280	30.177	-27.418	56.656	1.00	24.85
ATOM	15300	CD1	LEU	2280	30.958	-28.145	57.743	1.00	25.93
ATOM	15301	CD2	LEU	2280	30.742	-27.745	55.278	1.00	25.21
ATOM	15302	C	LEU	2280	26.376	-27.812	55.895	1.00	19.77
ATOM	15303	O	LEU	2280	25.774	-27.842	56.968	1.00	20.23
ATOM	15304	N	GLU	2281	25.908	-28.364	54.783	1.00	20.33
ATOM	15305	CA	GLU	2281	24.615	-29.023	54.747	1.00	22.59
ATOM	15306	CB	GLU	2281	23.719	-28.328	53.713	1.00	24.29
ATOM	15307	CG	GLU	2281	22.401	-29.028	53.428	1.00	25.86
ATOM	15308	CD	GLU	2281	21.456	-28.177	52.592	1.00	28.07
ATOM	15309	OE1	GLU	2281	21.924	-27.208	51.960	1.00	27.88
ATOM	15310	OE2	GLU	2281	20.247	-28.486	52.555	1.00	30.09
ATOM	15311	C	GLU	2281	24.708	-30.513	54.437	1.00	23.66
ATOM	15312	O	GLU	2281	25.362	-30.918	53.476	1.00	24.09
ATOM	15313	N	CYS	2282	24.050	-31.316	55.271	1.00	24.83
ATOM	15314	CA	CYS	2282	24.006	-32.764	55.119	1.00	26.77
ATOM	15315	CB	CYS	2282	22.988	-33.136	54.048	1.00	27.38
ATOM	15316	SG	CYS	2282	21.317	-32.574	54.459	1.00	27.22
ATOM	15317	C	CYS	2282	25.354	-33.389	54.802	1.00	29.00
ATOM	15318	O	CYS	2282	25.623	-33.800	53.670	1.00	28.72
ATOM	15319	N	VAL	2283	26.193	-33.459	55.826	1.00	29.47
ATOM	15320	CA	VAL	2283	27.523	-34.025	55.702	1.00	32.15
ATOM	15321	CB	VAL	2283	28.579	-32.892	55.597	1.00	32.80
ATOM	15322	CG1	VAL	2283	28.491	-31.988	56.812	1.00	34.08
ATOM	15323	CG2	VAL	2283	29.967	-33.473	55.474	1.00	36.16
ATOM	15324	C	VAL	2283	27.785	-34.866	56.946	1.00	31.72
ATOM	15325	O	VAL	2283	27.325	-34.529	58.035	1.00	33.06
ATOM	15326	N	PRO	2284	28.510	-35.986	56.799	1.00	32.37
ATOM	15327	CD	PRO	2284	29.211	-36.504	55.614	1.00	31.82
ATOM	15328	CA	PRO	2284	28.787	-36.818	57.970	1.00	31.61
ATOM	15329	CB	PRO	2284	29.763	-37.866	57.430	1.00	31.74
ATOM	15330	CG	PRO	2284	30.393	-37.187	56.241	1.00	34.69
ATOM	15331	C	PRO	2284	29.367	-36.005	59.120	1.00	31.47
ATOM	15332	O	PRO	2284	30.239	-35.155	58.921	1.00	30.70
ATOM	15333	N	VAL	2285	28.865	-36.263	60.322	1.00	32.63
ATOM	15334	CA	VAL	2285	29.316	-35.561	61.514	1.00	33.69
ATOM	15335	CB	VAL	2285	28.795	-36.249	62.793	1.00	34.08
ATOM	15336	CG1	VAL	2285	29.136	-35.407	64.007	1.00	34.06
ATOM	15337	CG2	VAL	2285	27.296	-36.469	62.695	1.00	35.22
ATOM	15338	C	VAL	2285	30.835	-35.506	61.583	1.00	33.95
ATOM	15339	O	VAL	2285	31.407	-34.488	61.970	1.00	32.97
ATOM	15340	N	GLU	2286	31.479	-36.606	61.200	1.00	35.14
ATOM	15341	CA	GLU	2286	32.939	-36.702	61.225	1.00	36.30
ATOM	15342	CB	GLU	2286	33.393	-38.045	60.645	1.00	38.87
ATOM	15343	CG	GLU	2286	32.532	-39.236	61.031	1.00	43.96
ATOM	15344	CD	GLU	2286	32.222	-39.277	62.510	1.00	45.93
ATOM	15345	OE1	GLU	2286	33.165	-39.136	63.317	1.00	49.42
ATOM	15346	OE2	GLU	2286	31.037	-39.458	62.864	1.00	46.85
ATOM	15347	C	GLU	2286	33.570	-35.579	60.416	1.00	35.02
ATOM	15348	O	GLU	2286	34.452	-34.868	60.898	1.00	34.61
ATOM	15349	N	LEU	2287	33.116	-35.434	59.176	1.00	34.20
ATOM	15350	CA	LEU	2287	33.631	-34.406	58.284	1.00	33.45
ATOM	15351	CB	LEU	2287	32.973	-34.536	56.910	1.00	35.44

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ATOM   15352  CG   LEU  2287      33.858 -34.344  55.677  1.00 36.84
ATOM   15353  CD1  LEU  2287      33.022 -34.555  54.424  1.00 36.74
ATOM   15354  CD2  LEU  2287      34.479 -32.965  55.682  1.00 38.47
ATOM   15355  C    LEU  2287      33.363 -33.021  58.869  1.00 32.89
ATOM   15356  O    LEU  2287      34.232 -32.148  58.842  1.00 31.87
ATOM   15357  N    ALA  2288      32.158 -32.826  59.401  1.00 32.19
ATOM   15358  CA   ALA  2288      31.779 -31.547  59.999  1.00 31.97
ATOM   15359  CB   ALA  2288      30.367 -31.630  60.571  1.00 31.39
ATOM   15360  C    ALA  2288      32.762 -31.163  61.100  1.00 31.77
ATOM   15361  O    ALA  2288      33.092 -29.990  61.272  1.00 28.78
ATOM   15362  N    LYS  2289      33.219 -32.168  61.842  1.00 32.20
ATOM   15363  CA   LYS  2289      34.171 -31.966  62.927  1.00 33.72
ATOM   15364  CB   LYS  2289      34.452 -33.293  63.632  1.00 36.63
ATOM   15365  CG   LYS  2289      33.229 -33.940  64.255  1.00 41.13
ATOM   15366  CD   LYS  2289      33.491 -35.400  64.616  1.00 42.87
ATOM   15367  CE   LYS  2289      32.259 -36.040  65.241  1.00 43.20
ATOM   15368  NZ   LYS  2289      32.389 -37.516  65.366  1.00 42.39
ATOM   15369  C    LYS  2289      35.476 -31.401  62.384  1.00 33.12
ATOM   15370  O    LYS  2289      35.966 -30.378  62.863  1.00 32.46
ATOM   15371  N    ARG  2290      36.036 -32.079  61.385  1.00 33.84
ATOM   15372  CA   ARG  2290      37.288 -31.651  60.771  1.00 34.39
ATOM   15373  CB   ARG  2290      37.674 -32.589  59.624  1.00 36.92
ATOM   15374  CG   ARG  2290      38.244 -33.922  60.066  1.00 39.76
ATOM   15375  CD   ARG  2290      38.859 -34.667  58.888  1.00 41.62
ATOM   15376  NE   ARG  2290      37.866 -35.347  58.065  1.00 44.41
ATOM   15377  CZ   ARG  2290      38.110 -35.840  56.853  1.00 45.62
ATOM   15378  NH1  ARG  2290      39.319 -35.722  56.320  1.00 45.39
ATOM   15379  NH2  ARG  2290      37.149 -36.460  56.176  1.00 46.26
ATOM   15380  C    ARG  2290      37.206 -30.224  60.246  1.00 33.61
ATOM   15381  O    ARG  2290      38.051 -29.386  60.567  1.00 33.99
ATOM   15382  N    ILE  2291      36.189 -29.956  59.432  1.00 32.56
ATOM   15383  CA   ILE  2291      35.996 -28.629  58.858  1.00 30.31
ATOM   15384  CB   ILE  2291      34.739 -28.599  57.950  1.00 31.03
ATOM   15385  CG2  ILE  2291      34.514 -27.192  57.410  1.00 30.84
ATOM   15386  CG1  ILE  2291      34.914 -29.589  56.792  1.00 32.84
ATOM   15387  CD1  ILE  2291      33.694 -29.725  55.888  1.00 32.14
ATOM   15388  C    ILE  2291      35.860 -27.568  59.951  1.00 29.40
ATOM   15389  O    ILE  2291      36.503 -26.519  59.891  1.00 26.63
ATOM   15390  N    THR  2292      35.035 -27.849  60.956  1.00 27.90
ATOM   15391  CA   THR  2292      34.819 -26.904  62.051  1.00 28.75
ATOM   15392  CB   THR  2292      33.718 -27.406  63.010  1.00 28.08
ATOM   15393  OG1  THR  2292      32.489 -27.550  62.286  1.00 27.32
ATOM   15394  CG2  THR  2292      33.507 -26.418  64.147  1.00 27.19
ATOM   15395  C    THR  2292      36.086 -26.630  62.860  1.00 29.42
ATOM   15396  O    THR  2292      36.319 -25.501  63.298  1.00 28.54
ATOM   15397  N    GLU  2293      36.900 -27.663  63.052  1.00 30.75
ATOM   15398  CA   GLU  2293      38.138 -27.529  63.811  1.00 32.20
ATOM   15399  CB   GLU  2293      38.578 -28.894  64.348  1.00 35.28
ATOM   15400  CG   GLU  2293      37.547 -29.570  65.239  1.00 39.73
ATOM   15401  CD   GLU  2293      37.976 -30.958  65.686  1.00 42.81
ATOM   15402  OE1  GLU  2293      38.390 -31.763  64.822  1.00 44.94
ATOM   15403  OE2  GLU  2293      37.889 -31.250  66.899  1.00 44.47
ATOM   15404  C    GLU  2293      39.252 -26.929  62.963  1.00 30.90
ATOM   15405  O    GLU  2293      40.175 -26.306  63.487  1.00 31.84
ATOM   15406  N    ALA  2294      39.159 -27.102  61.649  1.00 30.60
ATOM   15407  CA   ALA  2294      40.180 -26.581  60.744  1.00 29.10
ATOM   15408  CB   ALA  2294      40.190 -27.394  59.456  1.00 29.45
ATOM   15409  C    ALA  2294      40.015 -25.099  60.417  1.00 28.58
ATOM   15410  O    ALA  2294      40.996 -24.404  60.150  1.00 27.98
ATOM   15411  N    LEU  2295      38.776 -24.620  60.432  1.00 26.57
ATOM   15412  CA   LEU  2295      38.501 -23.225  60.111  1.00 26.11
ATOM   15413  CB   LEU  2295      37.178 -23.108  59.348  1.00 26.01
ATOM   15414  CG   LEU  2295      37.097 -23.794  57.987  1.00 27.63
ATOM   15415  CD1  LEU  2295      35.761 -23.461  57.323  1.00 26.37
ATOM   15416  CD2  LEU  2295      38.242 -23.349  57.117  1.00 28.50
ATOM   15417  C    LEU  2295      38.449 -22.310  61.323  1.00 24.44
ATOM   15418  O    LEU  2295      37.961 -22.692  62.385  1.00 25.12
ATOM   15419  N    ALA  2296      38.953 -21.094  61.148  1.00 23.89
ATOM   15420  CA   ALA  2296      38.944 -20.102  62.212  1.00 23.70
ATOM   15421  CB   ALA  2296      40.053 -19.086  61.995  1.00 25.57
ATOM   15422  C    ALA  2296      37.591 -19.402  62.200  1.00 24.70
ATOM   15423  O    ALA  2296      37.079 -19.000  63.244  1.00 22.57
ATOM   15424  N    ILE  2297      37.015 -19.253  61.009  1.00 23.45
ATOM   15425  CA   ILE  2297      35.715 -18.601  60.877  1.00 23.32
ATOM   15426  CB   ILE  2297      35.407 -18.223  59.419  1.00 22.51
ATOM   15427  CG2  ILE  2297      36.401 -17.190  58.928  1.00 23.31
ATOM   15428  CG1  ILE  2297      35.410 -19.481  58.548  1.00 22.06
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ATOM  15429  CD1  ILE  2297      34.938 -19.252  57.130  1.00 23.01
ATOM  15430  C    ILE  2297      34.625 -19.553  61.354  1.00 21.65
ATOM  15431  O    ILE  2297      34.782 -20.768  61.288  1.00 22.46
ATOM  15432  N    PRO  2298      33.499 -19.009  61.836  1.00 22.06
ATOM  15433  CD   PRO  2298      33.188 -17.587  62.064  1.00 22.11
ATOM  15434  CA   PRO  2298      32.417 -19.873  62.312  1.00 20.85
ATOM  15435  CB   PRO  2298      31.437 -18.884  62.942  1.00 21.35
ATOM  15436  CG   PRO  2298      31.698 -17.610  62.208  1.00 24.05
ATOM  15437  C    PRO  2298      31.793 -20.728  61.213  1.00 22.19
ATOM  15438  O    PRO  2298      31.678 -20.304  60.062  1.00 20.87
ATOM  15439  N    VAL  2299      31.416 -21.945  61.585  1.00 20.48
ATOM  15440  CA   VAL  2299      30.802 -22.899  60.669  1.00 21.54
ATOM  15441  CB   VAL  2299      31.628 -24.208  60.616  1.00 21.85
ATOM  15442  CG1  VAL  2299      30.961 -25.227  59.704  1.00 19.09
ATOM  15443  CG2  VAL  2299      33.035 -23.901  60.144  1.00 21.05
ATOM  15444  C    VAL  2299      29.385 -23.234  61.123  1.00 22.17
ATOM  15445  O    VAL  2299      29.189 -23.842  62.182  1.00 23.34
ATOM  15446  N    ILE  2300      28.402 -22.837  60.322  1.00 19.12
ATOM  15447  CA   ILE  2300      27.001 -23.099  60.641  1.00 18.65
ATOM  15448  CB   ILE  2300      26.087 -21.953  60.142  1.00 20.40
ATOM  15449  CG2  ILE  2300      24.633 -22.310  60.397  1.00 19.06
ATOM  15450  CG1  ILE  2300      26.480 -20.641  60.826  1.00 22.26
ATOM  15451  CD1  ILE  2300      25.706 -19.424  60.334  1.00 22.74
ATOM  15452  C    ILE  2300      26.566 -24.387  59.966  1.00 18.15
ATOM  15453  O    ILE  2300      26.727 -24.548  58.755  1.00 18.55
ATOM  15454  N    GLY  2301      26.007 -25.305  60.741  1.00 16.44
ATOM  15455  CA   GLY  2301      25.581 -26.564  60.168  1.00 17.23
ATOM  15456  C    GLY  2301      24.086 -26.811  60.070  1.00 20.10
ATOM  15457  O    GLY  2301      23.282 -26.228  60.800  1.00 17.24
ATOM  15458  N    ILE  2302      23.727 -27.683  59.134  1.00 21.06
ATOM  15459  CA   ILE  2302      22.348 -28.094  58.899  1.00 23.05
ATOM  15460  CB   ILE  2302      21.621 -27.163  57.872  1.00 26.00
ATOM  15461  CG2  ILE  2302      22.500 -26.896  56.653  1.00 27.12
ATOM  15462  CG1  ILE  2302      20.295 -27.790  57.452  1.00 27.76
ATOM  15463  CD1  ILE  2302      19.321 -27.937  58.577  1.00 31.67
ATOM  15464  C    ILE  2302      22.458 -29.517  58.358  1.00 23.20
ATOM  15465  O    ILE  2302      22.847 -29.730  57.211  1.00 23.36
ATOM  15466  N    GLY  2303      22.136 -30.493  59.200  1.00 24.09
ATOM  15467  CA   GLY  2303      22.254 -31.882  58.791  1.00 24.67
ATOM  15468  C    GLY  2303      23.715 -32.308  58.862  1.00 26.55
ATOM  15469  O    GLY  2303      24.149 -33.218  58.152  1.00 25.82
ATOM  15470  N    ALA  2304      24.472 -31.640  59.731  1.00 26.01
ATOM  15471  CA   ALA  2304      25.895 -31.923  59.910  1.00 26.83
ATOM  15472  CB   ALA  2304      26.721 -30.726  59.447  1.00 26.51
ATOM  15473  C    ALA  2304      26.247 -32.261  61.357  1.00 27.49
ATOM  15474  O    ALA  2304      27.424 -32.321  61.721  1.00 27.78
ATOM  15475  N    GLY  2305      25.227 -32.470  62.184  1.00 29.32
ATOM  15476  CA   GLY  2305      25.465 -32.796  63.580  1.00 29.51
ATOM  15477  C    GLY  2305      25.569 -31.564  64.459  1.00 29.45
ATOM  15478  O    GLY  2305      25.325 -30.447  63.998  1.00 29.69
ATOM  15479  N    ASN  2306      25.934 -31.766  65.725  1.00 27.86
ATOM  15480  CA   ASN  2306      26.062 -30.663  66.672  1.00 27.30
ATOM  15481  CB   ASN  2306      25.404 -31.029  68.014  1.00 26.47
ATOM  15482  CG   ASN  2306      26.124 -32.165  68.750  1.00 29.23
ATOM  15483  OD1  ASN  2306      25.801 -32.469  69.902  1.00 30.22
ATOM  15484  ND2  ASN  2306      27.090 -32.791  68.093  1.00 24.10
ATOM  15485  C    ASN  2306      27.508 -30.240  66.915  1.00 27.30
ATOM  15486  O    ASN  2306      27.801 -29.558  67.896  1.00 26.84
ATOM  15487  N    VAL  2307      28.406 -30.632  66.014  1.00 27.99
ATOM  15488  CA   VAL  2307      29.822 -30.302  66.150  1.00 27.99
ATOM  15489  CB   VAL  2307      30.706 -31.377  65.491  1.00 29.98
ATOM  15490  CG1  VAL  2307      32.168 -31.134  65.843  1.00 32.46
ATOM  15491  CG2  VAL  2307      30.272 -32.762  65.947  1.00 29.99
ATOM  15492  C    VAL  2307      30.168 -28.950  65.533  1.00 26.89
ATOM  15493  O    VAL  2307      31.257 -28.414  65.756  1.00 25.00
ATOM  15494  N    THR  2308      29.241 -28.402  64.753  1.00 25.39
ATOM  15495  CA   THR  2308      29.465 -27.113  64.116  1.00 24.44
ATOM  15496  CB   THR  2308      28.486 -26.890  62.930  1.00 24.99
ATOM  15497  OG1  THR  2308      27.134 -27.038  63.384  1.00 23.48
ATOM  15498  CG2  THR  2308      28.758 -27.897  61.815  1.00 23.59
ATOM  15499  C    THR  2308      29.293 -25.990  65.132  1.00 23.65
ATOM  15500  O    THR  2308      28.656 -26.169  66.167  1.00 25.62
ATOM  15501  N    ASP  2309      29.871 -24.834  64.834  1.00 23.25
ATOM  15502  CA   ASP  2309      29.785 -23.684  65.726  1.00 22.71
ATOM  15503  CB   ASP  2309      30.642 -22.546  65.189  1.00 22.91
ATOM  15504  CG   ASP  2309      32.098 -22.940  65.042  1.00 25.32
ATOM  15505  OD1  ASP  2309      32.722 -23.288  66.070  1.00 21.88
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ATOM	15506	OD2	ASP	2309	32.609	-22.900	63.904	1.00	22.96
ATOM	15507	C	ASP	2309	28.351	-23.206	65.883	1.00	22.86
ATOM	15508	O	ASP	2309	27.937	-22.793	66.966	1.00	23.77
ATOM	15509	N	GLY	2310	27.592	-23.257	64.798	1.00	22.07
ATOM	15510	CA	GLY	2310	26.209	-22.814	64.857	1.00	21.62
ATOM	15511	C	GLY	2310	25.283	-23.769	64.136	1.00	20.15
ATOM	15512	O	GLY	2310	25.731	-24.742	63.533	1.00	19.40
ATOM	15513	N	GLN	2311	23.986	-23.487	64.190	1.00	21.21
ATOM	15514	CA	GLN	2311	22.990	-24.332	63.541	1.00	19.77
ATOM	15515	CB	GLN	2311	22.204	-25.118	64.592	1.00	20.52
ATOM	15516	CG	GLN	2311	23.001	-26.179	65.329	1.00	22.52
ATOM	15517	CD	GLN	2311	23.541	-27.243	64.390	1.00	21.75
ATOM	15518	OE1	GLN	2311	22.848	-27.687	63.474	1.00	21.80
ATOM	15519	NE2	GLN	2311	24.780	-27.666	64.623	1.00	21.19
ATOM	15520	C	GLN	2311	22.009	-23.485	62.736	1.00	20.67
ATOM	15521	O	GLN	2311	21.772	-22.328	63.071	1.00	17.41
ATOM	15522	N	ILE	2312	21.447	-24.060	61.676	1.00	22.09
ATOM	15523	CA	ILE	2312	20.467	-23.343	60.872	1.00	24.89
ATOM	15524	CB	ILE	2312	21.110	-22.706	59.606	1.00	25.72
ATOM	15525	CG2	ILE	2312	21.564	-23.786	58.635	1.00	26.02
ATOM	15526	CG1	ILE	2312	20.100	-21.773	58.932	1.00	27.58
ATOM	15527	CD1	ILE	2312	20.741	-20.666	58.103	1.00	29.83
ATOM	15528	C	ILE	2312	19.342	-24.292	60.477	1.00	27.16
ATOM	15529	O	ILE	2312	19.570	-25.481	60.251	1.00	28.46
ATOM	15530	N	LEU	2313	18.120	-23.774	60.419	1.00	27.96
ATOM	15531	CA	LEU	2313	16.981	-24.604	60.058	1.00	29.89
ATOM	15532	CB	LEU	2313	16.438	-25.308	61.299	1.00	32.34
ATOM	15533	CG	LEU	2313	16.079	-26.791	61.172	1.00	36.07
ATOM	15534	CD1	LEU	2313	15.437	-27.236	62.479	1.00	36.26
ATOM	15535	CD2	LEU	2313	15.130	-27.027	60.000	1.00	35.23
ATOM	15536	C	LEU	2313	15.877	-23.765	59.434	1.00	29.08
ATOM	15537	O	LEU	2313	15.752	-22.578	59.735	1.00	26.94
ATOM	15538	N	VAL	2314	15.088	-24.386	58.558	1.00	28.13
ATOM	15539	CA	VAL	2314	13.984	-23.699	57.902	1.00	26.96
ATOM	15540	CB	VAL	2314	13.493	-24.457	56.647	1.00	28.27
ATOM	15541	CG1	VAL	2314	12.350	-23.692	55.999	1.00	28.30
ATOM	15542	CG2	VAL	2314	14.638	-24.638	55.666	1.00	28.58
ATOM	15543	C	VAL	2314	12.837	-23.628	58.899	1.00	25.72
ATOM	15544	O	VAL	2314	12.331	-24.654	59.350	1.00	25.30
ATOM	15545	N	MET	2315	12.444	-22.411	59.249	1.00	25.28
ATOM	15546	CA	MET	2315	11.367	-22.196	60.205	1.00	22.98
ATOM	15547	CB	MET	2315	11.025	-20.711	60.278	1.00	20.69
ATOM	15548	CG	MET	2315	10.539	-20.145	58.960	1.00	20.27
ATOM	15549	SD	MET	2315	9.305	-18.854	59.197	1.00	19.44
ATOM	15550	CE	MET	2315	7.864	-19.873	59.416	1.00	17.93
ATOM	15551	C	MET	2315	10.103	-22.996	59.876	1.00	22.84
ATOM	15552	O	MET	2315	9.407	-23.463	60.776	1.00	24.09
ATOM	15553	N	HIS	2316	9.807	-23.162	58.591	1.00	23.24
ATOM	15554	CA	HIS	2316	8.616	-23.903	58.180	1.00	22.87
ATOM	15555	CB	HIS	2316	8.445	-23.796	56.662	1.00	21.29
ATOM	15556	CG	HIS	2316	7.970	-22.449	56.216	1.00	20.22
ATOM	15557	CD2	HIS	2316	8.651	-21.318	55.913	1.00	17.37
ATOM	15558	ND1	HIS	2316	6.633	-22.120	56.152	1.00	20.75
ATOM	15559	CE1	HIS	2316	6.511	-20.844	55.833	1.00	20.50
ATOM	15560	NE2	HIS	2316	7.721	-20.333	55.684	1.00	20.64
ATOM	15561	C	HIS	2316	8.612	-25.360	58.634	1.00	24.41
ATOM	15562	O	HIS	2316	7.551	-25.965	58.787	1.00	23.54
ATOM	15563	N	ASP	2317	9.790	-25.936	58.845	1.00	25.53
ATOM	15564	CA	ASP	2317	9.850	-27.313	59.330	1.00	27.90
ATOM	15565	CB	ASP	2317	11.101	-28.029	58.813	1.00	31.10
ATOM	15566	CG	ASP	2317	10.984	-28.436	57.358	1.00	32.92
ATOM	15567	OD1	ASP	2317	9.936	-29.002	56.979	1.00	36.68
ATOM	15568	OD2	ASP	2317	11.944	-28.205	56.598	1.00	35.40
ATOM	15569	C	ASP	2317	9.874	-27.291	60.857	1.00	27.46
ATOM	15570	O	ASP	2317	9.268	-28.140	61.512	1.00	28.41
ATOM	15571	N	ALA	2318	10.571	-26.304	61.410	1.00	28.19
ATOM	15572	CA	ALA	2318	10.703	-26.154	62.853	1.00	29.17
ATOM	15573	CB	ALA	2318	11.566	-24.946	63.167	1.00	31.06
ATOM	15574	C	ALA	2318	9.357	-26.025	63.553	1.00	30.52
ATOM	15575	O	ALA	2318	9.230	-26.371	64.727	1.00	30.59
ATOM	15576	N	PHE	2319	8.355	-25.526	62.834	1.00	29.73
ATOM	15577	CA	PHE	2319	7.029	-25.357	63.416	1.00	29.63
ATOM	15578	CB	PHE	2319	6.545	-23.917	63.234	1.00	29.46
ATOM	15579	CG	PHE	2319	7.529	-22.886	63.711	1.00	31.82
ATOM	15580	CD1	PHE	2319	8.150	-23.020	64.950	1.00	32.14
ATOM	15581	CD2	PHE	2319	7.827	-21.778	62.928	1.00	32.09
ATOM	15582	CE1	PHE	2319	9.056	-22.067	65.398	1.00	32.92

ATOM	15583	CE2	PHE	2319	8.731	-20.818	63.366	1.00	32.42
ATOM	15584	CZ	PHE	2319	9.347	-20.963	64.606	1.00	33.77
ATOM	15585	C	PHE	2319	6.017	-26.318	62.818	1.00	28.48
ATOM	15586	O	PHE	2319	4.811	-26.115	62.941	1.00	29.39
ATOM	15587	N	GLY	2320	6.515	-27.368	62.175	1.00	30.40
ATOM	15588	CA	GLY	2320	5.639	-28.357	61.573	1.00	29.32
ATOM	15589	C	GLY	2320	4.618	-27.800	60.597	1.00	28.92
ATOM	15590	O	GLY	2320	3.574	-28.410	60.380	1.00	28.53
ATOM	15591	N	ILE	2321	4.915	-26.647	60.003	1.00	28.40
ATOM	15592	CA	ILE	2321	4.001	-26.029	59.047	1.00	28.56
ATOM	15593	CB	ILE	2321	4.425	-24.573	58.729	1.00	26.93
ATOM	15594	CG2	ILE	2321	3.532	-23.991	57.646	1.00	28.95
ATOM	15595	CG1	ILE	2321	4.342	-23.721	60.001	1.00	27.13
ATOM	15596	CD1	ILE	2321	4.875	-22.326	59.854	1.00	23.13
ATOM	15597	C	ILE	2321	3.946	-26.823	57.746	1.00	30.05
ATOM	15598	O	ILE	2321	2.876	-27.052	57.190	1.00	28.53
ATOM	15599	N	THR	2322	5.106	-27.249	57.264	1.00	32.75
ATOM	15600	CA	THR	2322	5.163	-28.000	56.021	1.00	37.43
ATOM	15601	CB	THR	2322	6.567	-27.946	55.417	1.00	38.04
ATOM	15602	OG1	THR	2322	7.450	-28.764	56.190	1.00	41.53
ATOM	15603	CG2	THR	2322	7.084	-26.520	55.431	1.00	36.66
ATOM	15604	C	THR	2322	4.775	-29.454	56.242	1.00	40.21
ATOM	15605	O	THR	2322	5.297	-30.112	57.143	1.00	40.84
ATOM	15606	N	GLY	2323	3.853	-29.942	55.415	1.00	43.61
ATOM	15607	CA	GLY	2323	3.395	-31.320	55.509	1.00	48.35
ATOM	15608	C	GLY	2323	3.586	-31.967	56.868	1.00	51.33
ATOM	15609	O	GLY	2323	3.286	-31.368	57.903	1.00	51.84
ATOM	15610	N	GLY	2324	4.090	-33.196	56.867	1.00	53.18
ATOM	15611	CA	GLY	2324	4.309	-33.900	58.116	1.00	54.96
ATOM	15612	C	GLY	2324	5.535	-34.783	58.065	1.00	56.02
ATOM	15613	O	GLY	2324	5.938	-35.358	59.076	1.00	57.03
ATOM	15614	N	HIS	2325	6.132	-34.889	56.884	1.00	56.32
ATOM	15615	CA	HIS	2325	7.322	-35.710	56.701	1.00	56.49
ATOM	15616	CB	HIS	2325	7.148	-36.604	55.475	1.00	58.75
ATOM	15617	CG	HIS	2325	5.979	-37.532	55.571	1.00	61.46
ATOM	15618	CD2	HIS	2325	4.882	-37.670	54.788	1.00	62.32
ATOM	15619	ND1	HIS	2325	5.852	-38.467	56.576	1.00	62.35
ATOM	15620	CE1	HIS	2325	4.728	-39.141	56.408	1.00	63.14
ATOM	15621	NE2	HIS	2325	4.121	-38.677	55.330	1.00	63.31
ATOM	15622	C	HIS	2325	8.572	-34.852	56.543	1.00	55.31
ATOM	15623	O	HIS	2325	9.174	-34.805	55.470	1.00	55.03
ATOM	15624	N	ILE	2326	8.959	-34.177	57.622	1.00	53.27
ATOM	15625	CA	ILE	2326	10.137	-33.318	57.608	1.00	50.77
ATOM	15626	CB	ILE	2326	10.230	-32.483	58.898	1.00	50.89
ATOM	15627	CG2	ILE	2326	8.991	-31.612	59.043	1.00	50.89
ATOM	15628	CG1	ILE	2326	10.380	-33.408	60.107	1.00	51.06
ATOM	15629	CD1	ILE	2326	10.620	-32.672	61.410	1.00	50.63
ATOM	15630	C	ILE	2326	11.408	-34.151	57.473	1.00	48.48
ATOM	15631	O	ILE	2326	11.400	-35.356	57.722	1.00	48.12
ATOM	15632	N	PRO	2327	12.523	-33.517	57.076	1.00	46.61
ATOM	15633	CD	PRO	2327	12.695	-32.092	56.746	1.00	46.53
ATOM	15634	CA	PRO	2327	13.785	-34.247	56.923	1.00	45.07
ATOM	15635	CB	PRO	2327	14.710	-33.205	56.296	1.00	45.91
ATOM	15636	CG	PRO	2327	14.194	-31.918	56.854	1.00	46.83
ATOM	15637	C	PRO	2327	14.317	-34.796	58.245	1.00	43.14
ATOM	15638	O	PRO	2327	13.982	-34.292	59.318	1.00	42.61
ATOM	15639	N	LYS	2328	15.144	-35.833	58.163	1.00	41.21
ATOM	15640	CA	LYS	2328	15.716	-36.455	59.354	1.00	38.78
ATOM	15641	CB	LYS	2328	16.536	-37.692	58.967	1.00	41.48
ATOM	15642	CG	LYS	2328	15.696	-38.917	58.617	1.00	45.03
ATOM	15643	CD	LYS	2328	14.760	-38.644	57.447	1.00	47.19
ATOM	15644	CE	LYS	2328	13.770	-39.779	57.245	1.00	48.48
ATOM	15645	NZ	LYS	2328	12.793	-39.463	56.165	1.00	49.27
ATOM	15646	C	LYS	2328	16.583	-35.513	60.181	1.00	35.61
ATOM	15647	O	LYS	2328	16.774	-35.732	61.376	1.00	34.87
ATOM	15648	N	PHE	2329	17.102	-34.463	59.553	1.00	31.28
ATOM	15649	CA	PHE	2329	17.955	-33.514	60.262	1.00	28.57
ATOM	15650	CB	PHE	2329	19.028	-32.967	59.315	1.00	28.07
ATOM	15651	CG	PHE	2329	18.480	-32.290	58.089	1.00	29.05
ATOM	15652	CD1	PHE	2329	17.954	-31.004	58.157	1.00	28.21
ATOM	15653	CD2	PHE	2329	18.506	-32.935	56.857	1.00	29.00
ATOM	15654	CE1	PHE	2329	17.470	-30.367	57.011	1.00	28.14
ATOM	15655	CE2	PHE	2329	18.026	-32.309	55.708	1.00	28.09
ATOM	15656	CZ	PHE	2329	17.506	-31.023	55.785	1.00	29.29
ATOM	15657	C	PHE	2329	17.179	-32.365	60.896	1.00	26.22
ATOM	15658	O	PHE	2329	17.734	-31.568	61.649	1.00	24.18
ATOM	15659	N	ALA	2330	15.888	-32.288	60.597	1.00	26.36

ATOM	15660	CA	ALA	2330	15.051	-31.225	61.133	1.00	25.12
ATOM	15661	CB	ALA	2330	14.109	-30.721	60.048	1.00	24.79
ATOM	15662	C	ALA	2330	14.250	-31.701	62.336	1.00	25.45
ATOM	15663	O	ALA	2330	14.066	-32.900	62.540	1.00	26.65
ATOM	15664	N	LYS	2331	13.761	-30.751	63.123	1.00	25.57
ATOM	15665	CA	LYS	2331	12.966	-31.068	64.299	1.00	25.38
ATOM	15666	CB	LYS	2331	13.861	-31.093	65.541	1.00	26.54
ATOM	15667	CG	LYS	2331	13.128	-31.323	66.853	1.00	27.14
ATOM	15668	CD	LYS	2331	14.114	-31.421	68.013	1.00	27.67
ATOM	15669	CE	LYS	2331	13.404	-31.585	69.352	1.00	28.98
ATOM	15670	NZ	LYS	2331	14.389	-31.782	70.465	1.00	25.48
ATOM	15671	C	LYS	2331	11.845	-30.051	64.486	1.00	24.96
ATOM	15672	O	LYS	2331	12.060	-28.842	64.371	1.00	23.50
ATOM	15673	N	ASN	2332	10.647	-30.553	64.758	1.00	24.26
ATOM	15674	CA	ASN	2332	9.488	-29.697	64.981	1.00	23.93
ATOM	15675	CB	ASN	2332	8.197	-30.456	64.641	1.00	23.26
ATOM	15676	CG	ASN	2332	6.941	-29.655	64.953	1.00	22.69
ATOM	15677	OD1	ASN	2332	7.009	-28.540	65.474	1.00	23.56
ATOM	15678	ND2	ASN	2332	5.788	-30.226	64.641	1.00	23.07
ATOM	15679	C	ASN	2332	9.469	-29.286	66.446	1.00	23.54
ATOM	15680	O	ASN	2332	9.098	-30.076	67.311	1.00	25.07
ATOM	15681	N	PHE	2333	9.874	-28.054	66.728	1.00	25.71
ATOM	15682	CA	PHE	2333	9.894	-27.567	68.103	1.00	26.02
ATOM	15683	CB	PHE	2333	10.884	-26.411	68.245	1.00	27.67
ATOM	15684	CG	PHE	2333	12.317	-26.826	68.102	1.00	25.56
ATOM	15685	CD1	PHE	2333	12.885	-26.981	66.846	1.00	24.93
ATOM	15686	CD2	PHE	2333	13.091	-27.086	69.224	1.00	25.58
ATOM	15687	CE1	PHE	2333	14.210	-27.392	66.706	1.00	25.54
ATOM	15688	CE2	PHE	2333	14.416	-27.498	69.098	1.00	27.73
ATOM	15689	CZ	PHE	2333	14.972	-27.649	67.836	1.00	24.35
ATOM	15690	C	PHE	2333	8.529	-27.126	68.606	1.00	28.07
ATOM	15691	O	PHE	2333	8.295	-27.112	69.812	1.00	26.50
ATOM	15692	N	LEU	2334	7.633	-26.759	67.693	1.00	28.99
ATOM	15693	CA	LEU	2334	6.296	-26.330	68.095	1.00	30.49
ATOM	15694	CB	LEU	2334	5.497	-25.820	66.889	1.00	28.12
ATOM	15695	CG	LEU	2334	4.023	-25.483	67.170	1.00	27.45
ATOM	15696	CD1	LEU	2334	3.933	-24.502	68.323	1.00	24.55
ATOM	15697	CD2	LEU	2334	3.363	-24.897	65.924	1.00	25.02
ATOM	15698	C	LEU	2334	5.548	-27.485	68.751	1.00	32.07
ATOM	15699	O	LEU	2334	4.865	-27.297	69.757	1.00	32.09
ATOM	15700	N	ALA	2335	5.688	-28.678	68.177	1.00	35.05
ATOM	15701	CA	ALA	2335	5.030	-29.877	68.694	1.00	38.84
ATOM	15702	CB	ALA	2335	5.356	-31.072	67.810	1.00	38.92
ATOM	15703	C	ALA	2335	5.452	-30.162	70.130	1.00	41.82
ATOM	15704	O	ALA	2335	4.646	-30.605	70.950	1.00	42.61
ATOM	15705	N	GLU	2336	6.723	-29.907	70.424	1.00	45.17
ATOM	15706	CA	GLU	2336	7.273	-30.115	71.761	1.00	48.42
ATOM	15707	CB	GLU	2336	8.790	-29.899	71.741	1.00	50.16
ATOM	15708	CG	GLU	2336	9.571	-30.928	70.936	1.00	52.50
ATOM	15709	CD	GLU	2336	9.730	-32.246	71.666	1.00	53.36
ATOM	15710	OE1	GLU	2336	8.701	-32.871	72.005	1.00	54.49
ATOM	15711	OE2	GLU	2336	10.888	-32.655	71.906	1.00	54.14
ATOM	15712	C	GLU	2336	6.639	-29.130	72.739	1.00	49.37
ATOM	15713	O	GLU	2336	6.895	-29.184	73.941	1.00	49.41
ATOM	15714	N	THR	2337	5.816	-28.228	72.211	1.00	49.87
ATOM	15715	CA	THR	2337	5.150	-27.220	73.026	1.00	49.76
ATOM	15716	CB	THR	2337	6.024	-25.946	73.137	1.00	50.97
ATOM	15717	OG1	THR	2337	5.387	-24.995	74.000	1.00	52.74
ATOM	15718	CG2	THR	2337	6.235	-25.319	71.764	1.00	51.29
ATOM	15719	C	THR	2337	3.793	-26.853	72.424	1.00	48.80
ATOM	15720	O	THR	2337	3.150	-27.676	71.768	1.00	48.94
ATOM	15721	N	GLY	2338	3.356	-25.619	72.651	1.00	47.93
ATOM	15722	CA	GLY	2338	2.080	-25.178	72.114	1.00	45.01
ATOM	15723	C	GLY	2338	2.136	-23.730	71.680	1.00	43.22
ATOM	15724	O	GLY	2338	1.137	-23.163	71.243	1.00	43.86
ATOM	15725	N	ASP	2339	3.317	-23.134	71.795	1.00	40.41
ATOM	15726	CA	ASP	2339	3.518	-21.739	71.426	1.00	38.45
ATOM	15727	CB	ASP	2339	3.672	-20.895	72.696	1.00	40.39
ATOM	15728	CG	ASP	2339	3.966	-19.444	72.402	1.00	43.35
ATOM	15729	OD1	ASP	2339	5.137	-19.121	72.115	1.00	42.97
ATOM	15730	OD2	ASP	2339	3.018	-18.624	72.448	1.00	45.56
ATOM	15731	C	ASP	2339	4.749	-21.598	70.535	1.00	35.60
ATOM	15732	O	ASP	2339	5.797	-22.194	70.800	1.00	33.62
ATOM	15733	N	ILE	2340	4.618	-20.810	69.474	1.00	32.17
ATOM	15734	CA	ILE	2340	5.722	-20.606	68.540	1.00	29.10
ATOM	15735	CB	ILE	2340	5.268	-19.753	67.333	1.00	28.53
ATOM	15736	CG2	ILE	2340	6.447	-19.496	66.400	1.00	26.40

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ATOM   15737  CG1 ILE  2340     4.143 -20.477  66.587  1.00 27.31
ATOM   15738  CD1 ILE  2340     3.507 -19.653  65.474  1.00 27.21
ATOM   15739  C   ILE  2340     6.930 -19.945  69.202  1.00 27.86
ATOM   15740  O   ILE  2340     8.064 -20.405  69.045  1.00 27.30
ATOM   15741  N   ARG  2341     6.693 -18.867  69.942  1.00 25.33
ATOM   15742  CA  ARG  2341     7.788 -18.180  70.611  1.00 24.52
ATOM   15743  CB  ARG  2341     7.268 -16.927  71.323  1.00 23.55
ATOM   15744  CG  ARG  2341     6.902 -15.805  70.349  1.00 24.38
ATOM   15745  CD  ARG  2341     6.378 -14.561  71.051  1.00 27.22
ATOM   15746  NE  ARG  2341     6.060 -13.502  70.091  1.00 27.15
ATOM   15747  CZ  ARG  2341     5.076 -13.577  69.200  1.00 28.36
ATOM   15748  NH1 ARG  2341     4.308 -14.657  69.149  1.00 26.92
ATOM   15749  NH2 ARG  2341     4.871 -12.578  68.354  1.00 27.62
ATOM   15750  C   ARG  2341     8.499 -19.116  71.584  1.00 24.05
ATOM   15751  O   ARG  2341     9.713 -19.030  71.753  1.00 23.07
ATOM   15752  N   ALA  2342     7.742 -20.019  72.202  1.00 23.18
ATOM   15753  CA  ALA  2342     8.307 -20.987  73.138  1.00 24.94
ATOM   15754  CB  ALA  2342     7.194 -21.728  73.858  1.00 24.89
ATOM   15755  C   ALA  2342     9.179 -21.973  72.367  1.00 24.76
ATOM   15756  O   ALA  2342    10.204 -22.436  72.865  1.00 25.19
ATOM   15757  N   ALA  2343     8.755 -22.291  71.145  1.00 22.90
ATOM   15758  CA  ALA  2343     9.485 -23.210  70.281  1.00 21.20
ATOM   15759  CB  ALA  2343     8.648 -23.541  69.049  1.00 23.10
ATOM   15760  C   ALA  2343    10.810 -22.574  69.869  1.00 20.25
ATOM   15761  O   ALA  2343    11.840 -23.246  69.810  1.00 19.96
ATOM   15762  N   VAL  2344    10.774 -21.273  69.586  1.00 20.13
ATOM   15763  CA  VAL  2344    11.964 -20.530  69.203  1.00 20.13
ATOM   15764  CB  VAL  2344    11.612 -19.069  68.829  1.00 19.76
ATOM   15765  CG1 VAL  2344    12.883 -18.263  68.605  1.00 21.02
ATOM   15766  CG2 VAL  2344    10.751 -19.057  67.560  1.00 21.33
ATOM   15767  C   VAL  2344    12.983 -20.528  70.343  1.00 20.91
ATOM   15768  O   VAL  2344    14.186 -20.685  70.115  1.00 18.15
ATOM   15769  N   ARG  2345    12.504 -20.367  71.572  1.00 21.37
ATOM   15770  CA  ARG  2345    13.400 -20.354  72.721  1.00 23.97
ATOM   15771  CB  ARG  2345    12.664 -19.858  73.968  1.00 24.17
ATOM   15772  CG  ARG  2345    12.197 -18.414  73.882  1.00 24.76
ATOM   15773  CD  ARG  2345    11.797 -17.895  75.260  1.00 25.91
ATOM   15774  NE  ARG  2345    10.763 -18.723  75.872  1.00 27.57
ATOM   15775  CZ  ARG  2345     9.465 -18.611  75.617  1.00 28.92
ATOM   15776  NH1 ARG  2345     9.027 -17.698  74.758  1.00 28.97
ATOM   15777  NH2 ARG  2345     8.604 -19.417  76.218  1.00 30.22
ATOM   15778  C   ARG  2345    13.986 -21.742  72.974  1.00 25.12
ATOM   15779  O   ARG  2345    15.155 -21.870  73.337  1.00 26.08
ATOM   15780  N   GLN  2346    13.179 -22.778  72.772  1.00 24.82
ATOM   15781  CA  GLN  2346    13.649 -24.137  72.980  1.00 25.54
ATOM   15782  CB  GLN  2346    12.505 -25.133  72.822  1.00 27.18
ATOM   15783  CG  GLN  2346    12.832 -26.509  73.367  1.00 32.29
ATOM   15784  CD  GLN  2346    11.790 -27.544  72.996  1.00 35.43
ATOM   15785  OE1 GLN  2346    10.589 -27.269  73.029  1.00 38.83
ATOM   15786  NE2 GLN  2346    12.242 -28.746  72.648  1.00 36.41
ATOM   15787  C   GLN  2346    14.753 -24.461  71.974  1.00 25.43
ATOM   15788  O   GLN  2346    15.747 -25.104  72.309  1.00 24.79
ATOM   15789  N   TYR  2347    14.571 -24.008  70.738  1.00 24.34
ATOM   15790  CA  TYR  2347    15.555 -24.230  69.685  1.00 24.09
ATOM   15791  CB  TYR  2347    15.043 -23.659  68.358  1.00 24.72
ATOM   15792  CG  TYR  2347    16.087 -23.560  67.259  1.00 24.42
ATOM   15793  CD1 TYR  2347    16.883 -24.656  66.919  1.00 25.35
ATOM   15794  CE1 TYR  2347    17.814 -24.580  65.878  1.00 23.82
ATOM   15795  CD2 TYR  2347    16.248 -22.378  66.533  1.00 23.75
ATOM   15796  CE2 TYR  2347    17.174 -22.290  65.489  1.00 24.65
ATOM   15797  CZ  TYR  2347    17.952 -23.397  65.169  1.00 24.72
ATOM   15798  OH  TYR  2347    18.864 -23.316  64.135  1.00 24.29
ATOM   15799  C   TYR  2347    16.872 -23.569  70.052  1.00 24.13
ATOM   15800  O   TYR  2347    17.933 -24.175  69.930  1.00 23.75
ATOM   15801  N   MET  2348    16.799 -22.320  70.501  1.00 24.26
ATOM   15802  CA  MET  2348    17.996 -21.575  70.887  1.00 25.61
ATOM   15803  CB  MET  2348    17.606 -20.179  71.376  1.00 26.13
ATOM   15804  CG  MET  2348    17.038 -19.273  70.298  1.00 26.95
ATOM   15805  SD  MET  2348    16.196 -17.821  70.988  1.00 30.86
ATOM   15806  CE  MET  2348    17.540 -17.070  71.910  1.00 28.64
ATOM   15807  C   MET  2348    18.748 -22.305  71.990  1.00 25.38
ATOM   15808  O   MET  2348    19.973 -22.437  71.944  1.00 23.27
ATOM   15809  N   ALA  2349    17.993 -22.782  72.973  1.00 25.63
ATOM   15810  CA  ALA  2349    18.546 -23.490  74.121  1.00 26.87
ATOM   15811  CB  ALA  2349    17.452 -23.694  75.165  1.00 26.84
ATOM   15812  C   ALA  2349    19.189 -24.832  73.784  1.00 27.52
ATOM   15813  O   ALA  2349    20.325 -25.094  74.176  1.00 27.80
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ATOM   15814  N    GLU   2350      18.461 -25.681  73.065  1.00 27.55
ATOM   15815  CA   GLU   2350      18.982 -26.998  72.715  1.00 28.05
ATOM   15816  CB   GLU   2350      17.908 -27.832  72.020  1.00 27.67
ATOM   15817  CG   GLU   2350      16.646 -28.041  72.838  1.00 30.51
ATOM   15818  CD   GLU   2350      15.822 -29.206  72.325  1.00 30.48
ATOM   15819  OE1  GLU   2350      15.869 -29.475  71.108  1.00 32.21
ATOM   15820  OE2  GLU   2350      15.124 -29.849  73.135  1.00 33.22
ATOM   15821  C    GLU   2350      20.233 -26.937  71.844  1.00 28.06
ATOM   15822  O    GLU   2350      21.058 -27.849  71.877  1.00 26.63
ATOM   15823  N    VAL   2351      20.375 -25.873  71.060  1.00 28.58
ATOM   15824  CA   VAL   2351      21.548 -25.732  70.210  1.00 28.48
ATOM   15825  CB   VAL   2351      21.364 -24.605  69.162  1.00 29.53
ATOM   15826  CG1  VAL   2351      22.678 -24.341  68.438  1.00 28.56
ATOM   15827  CG2  VAL   2351      20.291 -25.003  68.162  1.00 26.63
ATOM   15828  C    VAL   2351      22.751 -25.406  71.091  1.00 30.61
ATOM   15829  O    VAL   2351      23.787 -26.061  71.009  1.00 29.24
ATOM   15830  N    GLU   2352      22.597 -24.404  71.951  1.00 31.03
ATOM   15831  CA   GLU   2352      23.676 -23.997  72.840  1.00 33.56
ATOM   15832  CB   GLU   2352      23.245 -22.796  73.681  1.00 34.00
ATOM   15833  CG   GLU   2352      24.353 -22.236  74.554  1.00 38.30
ATOM   15834  CD   GLU   2352      23.923 -21.011  75.328  1.00 40.92
ATOM   15835  OE1  GLU   2352      24.747 -20.485  76.109  1.00 42.56
ATOM   15836  OE2  GLU   2352      22.765 -20.571  75.159  1.00 42.53
ATOM   15837  C    GLU   2352      24.108 -25.137  73.760  1.00 34.18
ATOM   15838  O    GLU   2352      25.286 -25.266  74.090  1.00 34.72
ATOM   15839  N    SER   2353      23.149 -25.963  74.166  1.00 33.74
ATOM   15840  CA   SER   2353      23.428 -27.085  75.051  1.00 34.92
ATOM   15841  CB   SER   2353      22.166 -27.483  75.815  1.00 35.44
ATOM   15842  OG   SER   2353      21.737 -26.429  76.657  1.00 42.27
ATOM   15843  C    SER   2353      23.952 -28.299  74.299  1.00 34.42
ATOM   15844  O    SER   2353      24.568 -29.186  74.889  1.00 33.68
ATOM   15845  N    GLY   2354      23.703 -28.338  72.995  1.00 32.46
ATOM   15846  CA   GLY   2354      24.150 -29.463  72.198  1.00 31.21
ATOM   15847  C    GLY   2354      23.068 -30.518  72.070  1.00 30.92
ATOM   15848  O    GLY   2354      23.251 -31.517  71.373  1.00 31.34
ATOM   15849  N    VAL   2355      21.941 -30.301  72.747  1.00 29.25
ATOM   15850  CA   VAL   2355      20.814 -31.235  72.702  1.00 29.20
ATOM   15851  CB   VAL   2355      19.627 -30.718  73.547  1.00 29.10
ATOM   15852  CG1  VAL   2355      18.484 -31.725  73.510  1.00 29.45
ATOM   15853  CG2  VAL   2355      20.077 -30.467  74.976  1.00 32.59
ATOM   15854  C    VAL   2355      20.336 -31.413  71.264  1.00 27.59
ATOM   15855  O    VAL   2355      19.911 -32.498  70.863  1.00 26.05
ATOM   15856  N    TYR   2356      20.399 -30.330  70.498  1.00 28.08
ATOM   15857  CA   TYR   2356      19.992 -30.352  69.099  1.00 26.36
ATOM   15858  CB   TYR   2356      18.713 -29.543  68.889  1.00 25.86
ATOM   15859  CG   TYR   2356      18.309 -29.492  67.436  1.00 25.65
ATOM   15860  CD1  TYR   2356      17.733 -30.602  66.817  1.00 25.65
ATOM   15861  CE1  TYR   2356      17.433 -30.596  65.463  1.00 25.60
ATOM   15862  CD2  TYR   2356      18.569 -28.363  66.659  1.00 24.57
ATOM   15863  CE2  TYR   2356      18.271 -28.345  65.299  1.00 24.48
ATOM   15864  CZ   TYR   2356      17.705 -29.466  64.708  1.00 25.02
ATOM   15865  OH   TYR   2356      17.423 -29.471  63.361  1.00 25.86
ATOM   15866  C    TYR   2356      21.099 -29.749  68.245  1.00 27.03
ATOM   15867  O    TYR   2356      21.644 -28.695  68.580  1.00 26.04
ATOM   15868  N    PRO   2357      21.437 -30.405  67.124  1.00 29.12
ATOM   15869  CD   PRO   2357      22.345 -29.867  66.094  1.00 29.21
ATOM   15870  CA   PRO   2357      20.815 -31.650  66.668  1.00 30.27
ATOM   15871  CB   PRO   2357      21.151 -31.672  65.182  1.00 30.86
ATOM   15872  CG   PRO   2357      22.494 -31.034  65.145  1.00 30.20
ATOM   15873  C    PRO   2357      21.331 -32.886  67.397  1.00 32.19
ATOM   15874  O    PRO   2357      22.491 -32.943  67.804  1.00 31.74
ATOM   15875  N    GLY   2358      20.456 -33.870  67.565  1.00 33.64
ATOM   15876  CA   GLY   2358      20.849 -35.094  68.236  1.00 35.88
ATOM   15877  C    GLY   2358      21.322 -36.113  67.222  1.00 36.96
ATOM   15878  O    GLY   2358      21.388 -35.816  66.030  1.00 34.73
ATOM   15879  N    GLU   2359      21.652 -37.313  67.688  1.00 38.39
ATOM   15880  CA   GLU   2359      22.114 -38.369  66.795  1.00 40.49
ATOM   15881  CB   GLU   2359      22.507 -39.612  67.598  1.00 42.44
ATOM   15882  CG   GLU   2359      22.814 -40.830  66.733  1.00 45.21
ATOM   15883  CD   GLU   2359      23.978 -40.605  65.786  1.00 46.88
ATOM   15884  OE1  GLU   2359      24.082 -41.352  64.786  1.00 47.42
ATOM   15885  OE2  GLU   2359      24.792 -39.691  66.045  1.00 48.14
ATOM   15886  C    GLU   2359      21.031 -38.731  65.785  1.00 41.07
ATOM   15887  O    GLU   2359      21.328 -39.164  64.669  1.00 40.53
ATOM   15888  N    GLU   2360      19.773 -38.548  66.180  1.00 40.84
ATOM   15889  CA   GLU   2360      18.647 -38.862  65.302  1.00 41.55
ATOM   15890  CB   GLU   2360      17.321 -38.762  66.069  1.00 43.54
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ATOM	15891	CG	GLU	2360	17.420	-39.113	67.543	1.00	47.07
ATOM	15892	CD	GLU	2360	17.895	-37.944	68.389	1.00	48.49
ATOM	15893	OE1	GLU	2360	17.123	-36.972	68.545	1.00	48.54
ATOM	15894	OE2	GLU	2360	19.040	-37.993	68.890	1.00	49.09
ATOM	15895	C	GLU	2360	18.600	-37.912	64.109	1.00	40.20
ATOM	15896	O	GLU	2360	18.018	-38.231	63.073	1.00	40.08
ATOM	15897	N	HIS	2361	19.224	-36.748	64.261	1.00	38.76
ATOM	15898	CA	HIS	2361	19.236	-35.735	63.210	1.00	37.83
ATOM	15899	CB	HIS	2361	18.893	-34.368	63.809	1.00	37.62
ATOM	15900	CG	HIS	2361	17.711	-34.387	64.727	1.00	37.85
ATOM	15901	CD2	HIS	2361	17.616	-34.163	66.060	1.00	37.85
ATOM	15902	ND1	HIS	2361	16.436	-34.685	64.298	1.00	37.99
ATOM	15903	CE1	HIS	2361	15.607	-34.644	65.325	1.00	37.41
ATOM	15904	NE2	HIS	2361	16.297	-34.329	66.406	1.00	37.44
ATOM	15905	C	HIS	2361	20.588	-35.639	62.514	1.00	37.15
ATOM	15906	O	HIS	2361	20.815	-34.739	61.704	1.00	35.47
ATOM	15907	N	SER	2362	21.479	-36.569	62.829	1.00	37.15
ATOM	15908	CA	SER	2362	22.814	-36.561	62.251	1.00	37.47
ATOM	15909	CB	SER	2362	23.845	-36.519	63.376	1.00	37.24
ATOM	15910	OG	SER	2362	23.557	-35.456	64.274	1.00	38.09
ATOM	15911	C	SER	2362	23.087	-37.757	61.342	1.00	38.18
ATOM	15912	O	SER	2362	22.511	-38.831	61.519	1.00	37.89
ATOM	15913	N	PHE	2363	23.966	-37.559	60.363	1.00	38.60
ATOM	15914	CA	PHE	2363	24.333	-38.617	59.429	1.00	39.77
ATOM	15915	CB	PHE	2363	24.257	-38.119	57.983	1.00	39.50
ATOM	15916	CG	PHE	2363	22.932	-37.524	57.613	1.00	39.62
ATOM	15917	CD1	PHE	2363	22.689	-36.168	57.797	1.00	40.24
ATOM	15918	CD2	PHE	2363	21.923	-38.318	57.083	1.00	39.74
ATOM	15919	CE1	PHE	2363	21.461	-35.608	57.455	1.00	41.07
ATOM	15920	CE2	PHE	2363	20.690	-37.769	56.737	1.00	40.32
ATOM	15921	CZ	PHE	2363	20.459	-36.410	56.924	1.00	40.17
ATOM	15922	C...	PHE	2363	25.756	-39.089	59.719	1.00	40.49
ATOM	15923	O	PHE	2363	26.502	-38.428	60.442	1.00	39.62
ATOM	15924	N	HIS	2364	26.129	-40.228	59.145	1.00	41.96
ATOM	15925	CA	HIS	2364	27.462	-40.791	59.336	1.00	44.57
ATOM	15926	CB	HIS	2364	27.468	-41.742	60.532	1.00	44.77
ATOM	15927	CG	HIS	2364	27.333	-41.053	61.852	1.00	44.87
ATOM	15928	CD2	HIS	2364	26.330	-41.057	62.762	1.00	45.16
ATOM	15929	ND1	HIS	2364	28.310	-40.227	62.363	1.00	45.32
ATOM	15930	CE1	HIS	2364	27.916	-39.752	63.531	1.00	45.82
ATOM	15931	NE2	HIS	2364	26.718	-40.241	63.796	1.00	45.37
ATOM	15932	C	HIS	2364	27.935	-41.537	58.092	1.00	45.86
ATOM	15933	O	HIS	2364	29.117	-41.375	57.723	1.00	47.15
ATOM	15934	OXT	HIS	2364	27.124	-42.291	57.514	1.00	48.19
ATOM	15935	C1	KPL	2365	18.263	-24.454	54.329	1.00	39.29
ATOM	15936	C2	KPL	2365	19.445	-23.498	54.099	1.00	40.45
ATOM	15937	C3	KPL	2365	19.514	-22.489	55.256	1.00	40.25
ATOM	15938	C4	KPL	2365	20.756	-24.301	54.085	1.00	41.68
ATOM	15939	O1	KPL	2365	20.736	-25.261	53.017	1.00	44.61
ATOM	15940	C5	KPL	2365	19.261	-22.740	52.762	1.00	39.00
ATOM	15941	O2	KPL	2365	20.101	-22.834	51.890	1.00	40.74
ATOM	15942	C6	KPL	2365	18.054	-21.873	52.491	1.00	37.37
ATOM	15943	O3	KPL	2365	17.180	-21.735	53.324	1.00	37.05
ATOM	15944	O4	KPL	2365	17.942	-21.245	51.309	1.00	32.80
ATOM	15945	CB	MET	2401	40.796	32.161	43.908	1.00	71.21
ATOM	15946	CG	MET	2401	41.476	32.073	42.556	1.00	72.09
ATOM	15947	SD	MET	2401	42.294	33.600	42.104	1.00	73.69
ATOM	15948	CE	MET	2401	40.917	34.510	41.409	1.00	73.19
ATOM	15949	C	MET	2401	38.557	31.175	43.385	1.00	69.44
ATOM	15950	O	MET	2401	37.456	31.030	43.915	1.00	69.61
ATOM	15951	N	MET	2401	40.519	29.702	43.899	1.00	70.53
ATOM	15952	CA	MET	2401	39.842	30.999	44.194	1.00	70.42
ATOM	15953	N	LYS	2402	38.701	31.491	42.101	1.00	67.98
ATOM	15954	CA	LYS	2402	37.549	31.687	41.227	1.00	65.67
ATOM	15955	CB	LYS	2402	37.289	33.184	41.023	1.00	66.61
ATOM	15956	CG	LYS	2402	36.953	33.945	42.298	1.00	67.98
ATOM	15957	CD	LYS	2402	35.541	33.652	42.783	1.00	68.89
ATOM	15958	CE	LYS	2402	34.501	34.222	41.830	1.00	69.72
ATOM	15959	NZ	LYS	2402	33.116	34.024	42.339	1.00	70.87
ATOM	15960	C	LYS	2402	37.781	31.021	39.875	1.00	62.73
ATOM	15961	O	LYS	2402	38.258	31.656	38.935	1.00	63.72
ATOM	15962	N	PRO	2403	37.454	29.725	39.763	1.00	59.41
ATOM	15963	CD	PRO	2403	37.320	29.060	38.454	1.00	58.79
ATOM	15964	CA	PRO	2403	36.895	28.884	40.825	1.00	55.82
ATOM	15965	CB	PRO	2403	35.981	27.948	40.054	1.00	57.33
ATOM	15966	CG	PRO	2403	36.797	27.681	38.829	1.00	58.38
ATOM	15967	C	PRO	2403	37.987	28.122	41.576	1.00	52.24

ATOM	15968	O	PRO	2403	39.149	28.127	41.170	1.00	51.69
ATOM	15969	N	THR	2404	37.605	27.465	42.667	1.00	47.66
ATOM	15970	CA	THR	2404	38.550	26.690	43.463	1.00	43.63
ATOM	15971	CB	THR	2404	37.971	26.341	44.846	1.00	43.73
ATOM	15972	OG1	THR	2404	37.739	27.544	45.588	1.00	43.30
ATOM	15973	CG2	THR	2404	38.935	25.452	45.617	1.00	42.68
ATOM	15974	C	THR	2404	38.887	25.393	42.740	1.00	41.58
ATOM	15975	O	THR	2404	38.007	24.741	42.178	1.00	38.87
ATOM	15976	N	THR	2405	40.163	25.022	42.762	1.00	40.92
ATOM	15977	CA	THR	2405	40.617	23.807	42.101	1.00	40.37
ATOM	15978	CB	THR	2405	41.289	24.127	40.753	1.00	40.36
ATOM	15979	OG1	THR	2405	42.436	24.956	40.974	1.00	40.01
ATOM	15980	CG2	THR	2405	40.317	24.849	39.832	1.00	39.63
ATOM	15981	C	THR	2405	41.607	23.020	42.954	1.00	40.56
ATOM	15982	O	THR	2405	42.106	23.514	43.966	1.00	39.81
ATOM	15983	N	ILE	2406	41.883	21.790	42.531	1.00	40.97
ATOM	15984	CA	ILE	2406	42.815	20.909	43.228	1.00	41.27
ATOM	15985	CB	ILE	2406	43.064	19.621	42.414	1.00	41.43
ATOM	15986	CG2	ILE	2406	43.817	18.602	43.264	1.00	39.98
ATOM	15987	CG1	ILE	2406	41.730	19.036	41.949	1.00	42.65
ATOM	15988	CD1	ILE	2406	41.859	18.074	40.783	1.00	44.77
ATOM	15989	C	ILE	2406	44.154	21.614	43.423	1.00	41.31
ATOM	15990	O	ILE	2406	44.771	21.514	44.482	1.00	41.10
ATOM	15991	N	SER	2407	44.595	22.327	42.392	1.00	41.82
ATOM	15992	CA	SER	2407	45.864	23.043	42.442	1.00	42.16
ATOM	15993	CB	SER	2407	46.042	23.881	41.175	1.00	42.77
ATOM	15994	OG	SER	2407	46.077	23.056	40.026	1.00	45.09
ATOM	15995	C	SER	2407	45.974	23.942	43.669	1.00	41.86
ATOM	15996	O	SER	2407	47.060	24.130	44.217	1.00	42.04
ATOM	15997	N	LEU	2408	44.846	24.495	44.101	1.00	41.20
ATOM	15998	CA	LEU	2408	44.838	25.374	45.262	1.00	40.42
ATOM	15999	CB	LEU	2408	43.483	26.071	45.390	1.00	41.71
ATOM	16000	CG	LEU	2408	43.521	27.558	45.753	1.00	42.81
ATOM	16001	CD1	LEU	2408	42.115	28.034	46.090	1.00	42.95
ATOM	16002	CD2	LEU	2408	44.449	27.786	46.927	1.00	43.29
ATOM	16003	C	LEU	2408	45.126	24.580	46.533	1.00	39.32
ATOM	16004	O	LEU	2408	45.921	25.004	47.372	1.00	38.69
ATOM	16005	N	LEU	2409	44.475	23.428	46.668	1.00	38.01
ATOM	16006	CA	LEU	2409	44.658	22.571	47.836	1.00	37.10
ATOM	16007	CB	LEU	2409	43.746	21.348	47.748	1.00	36.29
ATOM	16008	CG	LEU	2409	42.235	21.599	47.772	1.00	37.24
ATOM	16009	CD1	LEU	2409	41.507	20.264	47.730	1.00	36.39
ATOM	16010	CD2	LEU	2409	41.859	22.369	49.024	1.00	36.03
ATOM	16011	C	LEU	2409	46.103	22.113	47.956	1.00	37.48
ATOM	16012	O	LEU	2409	46.654	22.037	49.055	1.00	37.24
ATOM	16013	N	GLN	2410	46.711	21.805	46.815	1.00	37.94
ATOM	16014	CA	GLN	2410	48.096	21.356	46.779	1.00	38.43
ATOM	16015	CB	GLN	2410	48.487	20.989	45.346	1.00	38.65
ATOM	16016	CG	GLN	2410	49.854	20.334	45.206	1.00	39.36
ATOM	16017	CD	GLN	2410	49.974	19.041	45.993	1.00	40.42
ATOM	16018	OE1	GLN	2410	50.233	19.054	47.198	1.00	40.18
ATOM	16019	NE2	GLN	2410	49.772	17.912	45.314	1.00	39.42
ATOM	16020	C	GLN	2410	48.986	22.477	47.299	1.00	38.19
ATOM	16021	O	GLN	2410	49.927	22.239	48.057	1.00	38.73
ATOM	16022	N	LYS	2411	48.676	23.701	46.888	1.00	38.25
ATOM	16023	CA	LYS	2411	49.431	24.866	47.324	1.00	38.59
ATOM	16024	CB	LYS	2411	48.887	26.129	46.652	1.00	40.48
ATOM	16025	CG	LYS	2411	49.561	27.410	47.114	1.00	44.48
ATOM	16026	CD	LYS	2411	48.792	28.639	46.664	1.00	46.76
ATOM	16027	CE	LYS	2411	49.479	29.911	47.132	1.00	48.94
ATOM	16028	NZ	LYS	2411	48.656	31.123	46.857	1.00	51.10
ATOM	16029	C	LYS	2411	49.313	25.009	48.839	1.00	37.82
ATOM	16030	O	LYS	2411	50.300	25.261	49.533	1.00	36.98
ATOM	16031	N	TYR	2412	48.094	24.846	49.346	1.00	36.70
ATOM	16032	CA	TYR	2412	47.839	24.959	50.776	1.00	36.04
ATOM	16033	CB	TYR	2412	46.364	24.667	51.075	1.00	38.21
ATOM	16034	CG	TYR	2412	45.409	25.792	50.731	1.00	39.60
ATOM	16035	CD1	TYR	2412	44.029	25.579	50.728	1.00	41.45
ATOM	16036	CE1	TYR	2412	43.137	26.615	50.450	1.00	42.37
ATOM	16037	CD2	TYR	2412	45.877	27.075	50.444	1.00	40.64
ATOM	16038	CE2	TYR	2412	44.995	28.117	50.166	1.00	41.94
ATOM	16039	CZ	TYR	2412	43.626	27.879	50.172	1.00	42.98
ATOM	16040	OH	TYR	2412	42.746	28.905	49.908	1.00	45.55
ATOM	16041	C	TYR	2412	48.726	24.020	51.587	1.00	33.83
ATOM	16042	O	TYR	2412	49.264	24.408	52.621	1.00	32.94
ATOM	16043	N	LYS	2413	48.884	22.787	51.118	1.00	32.53
ATOM	16044	CA	LYS	2413	49.711	21.825	51.832	1.00	34.20

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ATOM   16045  CB   LYS   2413     49.613  20.437  51.197  1.00 32.95
ATOM   16046  CG   LYS   2413     50.515  19.412  51.871  1.00 31.62
ATOM   16047  CD   LYS   2413     50.181  17.995  51.455  1.00 30.68
ATOM   16048  CE   LYS   2413     51.017  16.996  52.235  1.00 29.20
ATOM   16049  NZ   LYS   2413     50.512  15.606  52.122  1.00 28.10
ATOM   16050  C    LYS   2413     51.168  22.266  51.848  1.00 34.97
ATOM   16051  O    LYS   2413     51.864  22.101  52.848  1.00 33.55
ATOM   16052  N    GLN   2414     51.629  22.815  50.730  1.00 37.13
ATOM   16053  CA   GLN   2414     53.002  23.282  50.631  1.00 40.24
ATOM   16054  CB   GLN   2414     53.301  23.745  49.207  1.00 43.05
ATOM   16055  CG   GLN   2414     53.429  22.605  48.210  1.00 47.04
ATOM   16056  CD   GLN   2414     53.593  23.099  46.784  1.00 49.63
ATOM   16057  OE1  GLN   2414     54.346  24.043  46.523  1.00 51.23
ATOM   16058  NE2  GLN   2414     52.897  22.457  45.850  1.00 49.77
ATOM   16059  C    GLN   2414     53.228  24.425  51.609  1.00 41.12
ATOM   16060  O    GLN   2414     54.266  24.494  52.267  1.00 41.34
ATOM   16061  N    GLU   2415     52.247  25.315  51.704  1.00 41.66
ATOM   16062  CA   GLU   2415     52.325  26.454  52.609  1.00 42.25
ATOM   16063  CB   GLU   2415     51.333  27.536  52.180  1.00 43.79
ATOM   16064  CG   GLU   2415     51.495  27.981  50.740  1.00 46.53
ATOM   16065  CD   GLU   2415     50.637  29.182  50.404  1.00 47.48
ATOM   16066  OE1  GLU   2415     49.401  29.100  50.564  1.00 48.81
ATOM   16067  OE2  GLU   2415     51.202  30.212  49.979  1.00 49.09
ATOM   16068  C    GLU   2415     52.011  26.010  54.034  1.00 41.63
ATOM   16069  O    GLU   2415     52.000  26.820  54.964  1.00 41.75
ATOM   16070  N    LYS   2416     51.753  24.716  54.194  1.00 40.45
ATOM   16071  CA   LYS   2416     51.435  24.143  55.496  1.00 40.01
ATOM   16072  CB   LYS   2416     52.607  24.345  56.458  1.00 42.70
ATOM   16073  CG   LYS   2416     53.969  24.092  55.830  1.00 45.22
ATOM   16074  CD   LYS   2416     54.093  22.669  55.316  1.00 47.92
ATOM   16075  CE   LYS   2416     55.361  22.490  54.492  1.00 49.09
ATOM   16076  NZ   LYS   2416     56.586  22.872  55.248  1.00 50.44
ATOM   16077  C    LYS   2416     50.177  24.784  56.077  1.00 38.54
ATOM   16078  O    LYS   2416     50.012  24.850  57.295  1.00 38.60
ATOM   16079  N    LYS   2417     49.296  25.266  55.205  1.00 36.93
ATOM   16080  CA   LYS   2417     48.053  25.891  55.644  1.00 34.59
ATOM   16081  CB   LYS   2417     47.682  27.061  54.727  1.00 35.93
ATOM   16082  CG   LYS   2417     46.420  27.802  55.159  1.00 36.62
ATOM   16083  CD   LYS   2417     45.948  28.803  54.106  1.00 40.30
ATOM   16084  CE   LYS   2417     46.952  29.928  53.890  1.00 41.87
ATOM   16085  NZ   LYS   2417     46.553  30.824  52.762  1.00 42.71
ATOM   16086  C    LYS   2417     46.917  24.873  55.641  1.00 33.02
ATOM   16087  O    LYS   2417     46.510  24.388  54.584  1.00 31.46
ATOM   16088  N    ARG   2418     46.414  24.552  56.829  1.00 31.31
ATOM   16089  CA   ARG   2418     45.320  23.595  56.968  1.00 29.79
ATOM   16090  CB   ARG   2418     45.198  23.161  58.429  1.00 30.22
ATOM   16091  CG   ARG   2418     46.304  22.203  58.847  1.00 31.76
ATOM   16092  CD   ARG   2418     46.446  22.096  60.355  1.00 33.22
ATOM   16093  NE   ARG   2418     46.949  23.344  60.925  1.00 34.67
ATOM   16094  CZ   ARG   2418     47.516  23.446  62.122  1.00 34.59
ATOM   16095  NH1  ARG   2418     47.659  22.371  62.884  1.00 35.64
ATOM   16096  NH2  ARG   2418     47.938  24.623  62.556  1.00 33.41
ATOM   16097  C    ARG   2418     44.011  24.195  56.466  1.00 28.42
ATOM   16098  O    ARG   2418     43.638  25.300  56.854  1.00 28.67
ATOM   16099  N    PHE   2419     43.318  23.454  55.603  1.00 27.53
ATOM   16100  CA   PHE   2419     42.065  23.915  55.005  1.00 24.08
ATOM   16101  CB   PHE   2419     42.198  23.883  53.478  1.00 25.14
ATOM   16102  CG   PHE   2419     42.502  22.519  52.917  1.00 27.81
ATOM   16103  CD1  PHE   2419     41.472  21.650  52.560  1.00 27.73
ATOM   16104  CD2  PHE   2419     43.821  22.100  52.742  1.00 27.96
ATOM   16105  CE1  PHE   2419     41.748  20.387  52.036  1.00 26.05
ATOM   16106  CE2  PHE   2419     44.109  20.836  52.218  1.00 28.62
ATOM   16107  CZ   PHE   2419     43.070  19.978  51.864  1.00 27.50
ATOM   16108  C    PHE   2419     40.837  23.110  55.439  1.00 22.88
ATOM   16109  O    PHE   2419     40.930  21.924  55.734  1.00 19.16
ATOM   16110  N    ALA   2420     39.684  23.768  55.476  1.00 21.94
ATOM   16111  CA   ALA   2420     38.456  23.100  55.872  1.00 22.77
ATOM   16112  CB   ALA   2420     37.617  24.027  56.757  1.00 21.44
ATOM   16113  C    ALA   2420     37.640  22.656  54.660  1.00 22.17
ATOM   16114  O    ALA   2420     37.611  23.332  53.626  1.00 22.74
ATOM   16115  N    THR   2421     36.977  21.512  54.802  1.00 22.82
ATOM   16116  CA   THR   2421     36.138  20.942  53.750  1.00 22.02
ATOM   16117  CB   THR   2421     36.814  19.711  53.110  1.00 24.06
ATOM   16118  OG1  THR   2421     38.061  20.108  52.514  1.00 26.62
ATOM   16119  CG2  THR   2421     35.923  19.109  52.048  1.00 27.64
ATOM   16120  C    THR   2421     34.839  20.509  54.419  1.00 18.96
ATOM   16121  O    THR   2421     34.814  20.246  55.619  1.00 18.47
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ATOM	16122	N	ILE	2422	33.759	20.422	53.656	1.00	19.02
ATOM	16123	CA	ILE	2422	32.487	20.040	54.257	1.00	17.25
ATOM	16124	CB	ILE	2422	31.764	21.296	54.811	1.00	19.41
ATOM	16125	CG2	ILE	2422	31.183	22.112	53.667	1.00	20.48
ATOM	16126	CG1	ILE	2422	30.664	20.889	55.792	1.00	21.17
ATOM	16127	CD1	ILE	2422	30.129	22.046	56.604	1.00	25.73
ATOM	16128	C	ILE	2422	31.574	19.332	53.269	1.00	17.99
ATOM	16129	O	ILE	2422	31.726	19.474	52.059	1.00	16.35
ATOM	16130	N	THR	2423	30.625	18.569	53.793	1.00	17.55
ATOM	16131	CA	THR	2423	29.686	17.873	52.932	1.00	20.49
ATOM	16132	CB	THR	2423	29.163	16.577	53.580	1.00	21.53
ATOM	16133	OG1	THR	2423	28.287	16.899	54.668	1.00	22.21
ATOM	16134	CG2	THR	2423	30.327	15.738	54.098	1.00	26.19
ATOM	16135	C	THR	2423	28.514	18.815	52.682	1.00	19.08
ATOM	16136	O	THR	2423	28.210	19.678	53.504	1.00	18.44
ATOM	16137	N	ALA	2424	27.877	18.661	51.527	1.00	18.78
ATOM	16138	CA	ALA	2424	26.730	19.476	51.154	1.00	16.80
ATOM	16139	CB	ALA	2424	27.180	20.720	50.394	1.00	17.89
ATOM	16140	C	ALA	2424	25.843	18.614	50.269	1.00	17.29
ATOM	16141	O	ALA	2424	26.342	17.787	49.510	1.00	15.04
ATOM	16142	N	TYR	2425	24.532	18.795	50.361	1.00	16.73
ATOM	16143	CA	TYR	2425	23.633	17.982	49.547	1.00	17.37
ATOM	16144	CB	TYR	2425	23.040	16.852	50.387	1.00	16.33
ATOM	16145	CG	TYR	2425	24.006	16.220	51.351	1.00	17.54
ATOM	16146	CD1	TYR	2425	23.974	16.546	52.704	1.00	18.85
ATOM	16147	CE1	TYR	2425	24.846	15.954	53.605	1.00	19.50
ATOM	16148	CD2	TYR	2425	24.946	15.285	50.917	1.00	17.67
ATOM	16149	CE2	TYR	2425	25.829	14.684	51.815	1.00	18.16
ATOM	16150	CZ	TYR	2425	25.766	15.026	53.160	1.00	19.76
ATOM	16151	OH	TYR	2425	26.608	14.418	54.065	1.00	21.42
ATOM	16152	C	TYR	2425	22.496	18.760	48.908	1.00	18.27
ATOM	16153	O	TYR	2425	21.639	18.172	48.248	1.00	20.53
ATOM	16154	N	ASP	2426	22.477	20.074	49.101	1.00	17.43
ATOM	16155	CA	ASP	2426	21.420	20.899	48.525	1.00	17.57
ATOM	16156	CB	ASP	2426	20.228	20.964	49.486	1.00	17.38
ATOM	16157	CG	ASP	2426	20.581	21.617	50.824	1.00	18.75
ATOM	16158	OD1	ASP	2426	20.752	22.849	50.861	1.00	20.93
ATOM	16159	OD2	ASP	2426	20.687	20.892	51.836	1.00	19.12
ATOM	16160	C	ASP	2426	21.904	22.309	48.195	1.00	19.13
ATOM	16161	O	ASP	2426	22.985	22.720	48.615	1.00	19.45
ATOM	16162	N	TYR	2427	21.084	23.040	47.448	1.00	17.80
ATOM	16163	CA	TYR	2427	21.385	24.404	47.026	1.00	20.14
ATOM	16164	CB	TYR	2427	20.232	24.941	46.175	1.00	19.94
ATOM	16165	CG	TYR	2427	20.321	26.420	45.862	1.00	20.70
ATOM	16166	CD1	TYR	2427	21.142	26.891	44.838	1.00	20.50
ATOM	16167	CE1	TYR	2427	21.222	28.253	44.547	1.00	23.68
ATOM	16168	CD2	TYR	2427	19.581	27.351	46.594	1.00	23.01
ATOM	16169	CE2	TYR	2427	19.652	28.711	46.314	1.00	23.40
ATOM	16170	CZ	TYR	2427	20.470	29.156	45.291	1.00	24.74
ATOM	16171	OH	TYR	2427	20.526	30.499	45.006	1.00	28.18
ATOM	16172	C	TYR	2427	21.630	25.382	48.174	1.00	20.13
ATOM	16173	O	TYR	2427	22.609	26.124	48.163	1.00	19.70
ATOM	16174	N	SER	2428	20.727	25.379	49.148	1.00	20.69
ATOM	16175	CA	SER	2428	20.794	26.288	50.287	1.00	20.45
ATOM	16176	CB	SER	2428	19.592	26.055	51.200	1.00	21.08
ATOM	16177	OG	SER	2428	18.394	26.357	50.511	1.00	19.23
ATOM	16178	C	SER	2428	22.077	26.252	51.107	1.00	20.33
ATOM	16179	O	SER	2428	22.717	27.289	51.328	1.00	19.96
ATOM	16180	N	PHE	2429	22.456	25.073	51.580	1.00	18.92
ATOM	16181	CA	PHE	2429	23.678	24.976	52.363	1.00	18.46
ATOM	16182	CB	PHE	2429	23.739	23.643	53.120	1.00	17.47
ATOM	16183	CG	PHE	2429	22.916	23.633	54.381	1.00	18.24
ATOM	16184	CD1	PHE	2429	21.682	22.986	54.427	1.00	17.48
ATOM	16185	CD2	PHE	2429	23.370	24.296	55.524	1.00	15.99
ATOM	16186	CE1	PHE	2429	20.911	22.995	55.590	1.00	17.58
ATOM	16187	CE2	PHE	2429	22.611	24.312	56.686	1.00	13.97
ATOM	16188	CZ	PHE	2429	21.376	23.661	56.727	1.00	17.59
ATOM	16189	C	PHE	2429	24.917	25.174	51.496	1.00	19.44
ATOM	16190	O	PHE	2429	25.885	25.813	51.924	1.00	18.28
ATOM	16191	N	ALA	2430	24.892	24.653	50.271	1.00	20.34
ATOM	16192	CA	ALA	2430	26.035	24.831	49.381	1.00	22.75
ATOM	16193	CB	ALA	2430	25.805	24.092	48.064	1.00	22.82
ATOM	16194	C	ALA	2430	26.251	26.325	49.119	1.00	23.92
ATOM	16195	O	ALA	2430	27.388	26.792	49.003	1.00	25.09
ATOM	16196	N	LYS	2431	25.148	27.065	49.037	1.00	24.33
ATOM	16197	CA	LYS	2431	25.180	28.506	48.797	1.00	25.15
ATOM	16198	CB	LYS	2431	23.767	28.999	48.460	1.00	27.16

ATOM	16199	CG	LYS	2431	23.646	30.478	48.124	1.00	29.73
ATOM	16200	CD	LYS	2431	24.318	30.816	46.811	1.00	34.33
ATOM	16201	CE	LYS	2431	23.775	32.117	46.241	1.00	37.47
ATOM	16202	NZ	LYS	2431	23.956	33.264	47.174	1.00	39.95
ATOM	16203	C	LYS	2431	25.712	29.246	50.027	1.00	24.27
ATOM	16204	O	LYS	2431	26.546	30.145	49.918	1.00	23.43
ATOM	16205	N	LEU	2432	25.219	28.858	51.198	1.00	23.70
ATOM	16206	CA	LEU	2432	25.641	29.468	52.451	1.00	23.86
ATOM	16207	CB	LEU	2432	24.812	28.898	53.609	1.00	21.16
ATOM	16208	CG	LEU	2432	25.055	29.415	55.035	1.00	19.80
ATOM	16209	CD1	LEU	2432	23.849	29.079	55.909	1.00	16.46
ATOM	16210	CD2	LEU	2432	26.322	28.796	55.613	1.00	16.28
ATOM	16211	C	LEU	2432	27.132	29.240	52.697	1.00	24.74
ATOM	16212	O	LEU	2432	27.825	30.134	53.180	1.00	25.72
ATOM	16213	N	PHE	2433	27.630	28.051	52.367	1.00	25.69
ATOM	16214	CA	PHE	2433	29.049	27.752	52.567	1.00	25.88
ATOM	16215	CB	PHE	2433	29.343	26.259	52.358	1.00	25.66
ATOM	16216	CG	PHE	2433	28.615	25.342	53.307	1.00	23.12
ATOM	16217	CD1	PHE	2433	28.351	25.728	54.621	1.00	20.93
ATOM	16218	CD2	PHE	2433	28.204	24.076	52.884	1.00	22.54
ATOM	16219	CE1	PHE	2433	27.688	24.873	55.499	1.00	21.36
ATOM	16220	CE2	PHE	2433	27.542	23.214	53.756	1.00	21.24
ATOM	16221	CZ	PHE	2433	27.281	23.613	55.068	1.00	23.36
ATOM	16222	C	PHE	2433	29.918	28.557	51.606	1.00	28.10
ATOM	16223	O	PHE	2433	30.890	29.192	52.019	1.00	26.80
ATOM	16224	N	ALA	2434	29.575	28.520	50.319	1.00	28.19
ATOM	16225	CA	ALA	2434	30.341	29.250	49.314	1.00	29.37
ATOM	16226	CB	ALA	2434	29.714	29.072	47.934	1.00	28.66
ATOM	16227	C	ALA	2434	30.424	30.731	49.665	1.00	29.43
ATOM	16228	O	ALA	2434	31.465	31.358	49.480	1.00	29.86
ATOM	16229	N	ASP	2435	29.331	31.289	50.176	1.00	29.97
ATOM	16230	CA	ASP	2435	29.320	32.702	50.540	1.00	32.22
ATOM	16231	CB	ASP	2435	27.893	33.205	50.766	1.00	33.58
ATOM	16232	CG	ASP	2435	27.021	33.062	49.539	1.00	36.19
ATOM	16233	OD1	ASP	2435	27.540	33.202	48.409	1.00	37.94
ATOM	16234	OD2	ASP	2435	25.807	32.825	49.706	1.00	38.98
ATOM	16235	C	ASP	2435	30.143	32.997	51.787	1.00	32.06
ATOM	16236	O	ASP	2435	30.372	34.161	52.117	1.00	32.90
ATOM	16237	N	GLU	2436	30.580	31.955	52.486	1.00	31.24
ATOM	16238	CA	GLU	2436	31.376	32.149	53.687	1.00	31.97
ATOM	16239	CB	GLU	2436	30.816	31.326	54.850	1.00	32.11
ATOM	16240	CG	GLU	2436	29.464	31.801	55.357	1.00	33.39
ATOM	16241	CD	GLU	2436	29.453	33.285	55.680	1.00	33.83
ATOM	16242	OE1	GLU	2436	30.357	33.745	56.411	1.00	35.70
ATOM	16243	OE2	GLU	2436	28.537	33.987	55.208	1.00	33.76
ATOM	16244	C	GLU	2436	32.836	31.790	53.472	1.00	32.46
ATOM	16245	O	GLU	2436	33.659	31.983	54.362	1.00	32.04
ATOM	16246	N	GLY	2437	33.162	31.265	52.294	1.00	32.25
ATOM	16247	CA	GLY	2437	34.542	30.904	52.026	1.00	33.78
ATOM	16248	C	GLY	2437	34.786	29.425	51.797	1.00	33.68
ATOM	16249	O	GLY	2437	35.759	29.062	51.143	1.00	36.34
ATOM	16250	N	LEU	2438	33.927	28.569	52.347	1.00	32.66
ATOM	16251	CA	LEU	2438	34.066	27.127	52.161	1.00	32.08
ATOM	16252	CB	LEU	2438	33.059	26.372	53.031	1.00	32.00
ATOM	16253	CG	LEU	2438	33.606	25.758	54.314	1.00	31.91
ATOM	16254	CD1	LEU	2438	32.472	25.144	55.116	1.00	31.31
ATOM	16255	CD2	LEU	2438	34.656	24.708	53.977	1.00	32.09
ATOM	16256	C	LEU	2438	33.810	26.810	50.697	1.00	30.44
ATOM	16257	O	LEU	2438	32.659	26.721	50.267	1.00	30.98
ATOM	16258	N	ASN	2439	34.889	26.641	49.940	1.00	29.40
ATOM	16259	CA	ASN	2439	34.788	26.370	48.513	1.00	28.49
ATOM	16260	CB	ASN	2439	35.721	27.306	47.738	1.00	31.32
ATOM	16261	CG	ASN	2439	35.549	28.764	48.134	1.00	34.03
ATOM	16262	OD1	ASN	2439	34.435	29.292	48.140	1.00	36.11
ATOM	16263	ND2	ASN	2439	36.655	29.422	48.461	1.00	35.10
ATOM	16264	C	ASN	2439	35.122	24.922	48.173	1.00	26.24
ATOM	16265	O	ASN	2439	35.344	24.593	47.012	1.00	25.25
ATOM	16266	N	VAL	2440	35.155	24.065	49.188	1.00	24.29
ATOM	16267	CA	VAL	2440	35.446	22.657	48.985	1.00	24.09
ATOM	16268	CB	VAL	2440	36.774	22.248	49.640	1.00	25.05
ATOM	16269	CG1	VAL	2440	37.067	20.788	49.345	1.00	24.91
ATOM	16270	CG2	VAL	2440	37.896	23.126	49.114	1.00	25.37
ATOM	16271	C	VAL	2440	34.323	21.843	49.597	1.00	22.62
ATOM	16272	O	VAL	2440	34.228	21.711	50.816	1.00	19.04
ATOM	16273	N	MET	2441	33.471	21.297	48.737	1.00	21.81
ATOM	16274	CA	MET	2441	32.322	20.528	49.183	1.00	20.07
ATOM	16275	CB	MET	2441	31.033	21.250	48.785	1.00	22.11

ATOM	16276	CG	MET	2441	30.682	22.414	49.695	1.00	23.98
ATOM	16277	SD	MET	2441	29.512	23.563	48.974	1.00	25.48
ATOM	16278	CE	MET	2441	30.566	25.021	48.739	1.00	24.85
ATOM	16279	C	MET	2441	32.295	19.118	48.637	1.00	20.47
ATOM	16280	O	MET	2441	32.712	18.867	47.508	1.00	19.61
ATOM	16281	N	LEU	2442	31.786	18.200	49.450	1.00	19.57
ATOM	16282	CA	LEU	2442	31.689	16.805	49.055	1.00	20.14
ATOM	16283	CB	LEU	2442	32.576	15.951	49.964	1.00	20.82
ATOM	16284	CG	LEU	2442	32.654	14.421	49.855	1.00	24.63
ATOM	16285	CD1	LEU	2442	31.547	13.810	50.661	1.00	25.41
ATOM	16286	CD2	LEU	2442	32.611	13.956	48.399	1.00	22.10
ATOM	16287	C	LEU	2442	30.254	16.307	49.104	1.00	18.06
ATOM	16288	O	LEU	2442	29.556	16.453	50.109	1.00	15.33
ATOM	16289	N	VAL	2443	29.816	15.730	47.998	1.00	16.74
ATOM	16290	CA	VAL	2443	28.481	15.155	47.931	1.00	18.13
ATOM	16291	CB	VAL	2443	27.850	15.367	46.553	1.00	18.92
ATOM	16292	CG1	VAL	2443	26.449	14.756	46.527	1.00	18.84
ATOM	16293	CG2	VAL	2443	27.797	16.855	46.235	1.00	20.62
ATOM	16294	C	VAL	2443	28.743	13.675	48.162	1.00	18.17
ATOM	16295	O	VAL	2443	28.939	12.918	47.214	1.00	18.72
ATOM	16296	N	GLY	2444	28.759	13.278	49.432	1.00	17.59
ATOM	16297	CA	GLY	2444	29.047	11.901	49.773	1.00	17.73
ATOM	16298	C	GLY	2444	27.848	11.015	50.003	1.00	19.75
ATOM	16299	O	GLY	2444	26.722	11.499	50.162	1.00	18.97
ATOM	16300	N	ASP	2445	28.083	9.706	50.019	1.00	19.18
ATOM	16301	CA	ASP	2445	26.982	8.794	50.239	1.00	18.23
ATOM	16302	CB	ASP	2445	27.330	7.359	49.806	1.00	20.29
ATOM	16303	CG	ASP	2445	28.573	6.810	50.478	1.00	22.01
ATOM	16304	OD1	ASP	2445	29.074	7.424	51.443	1.00	22.09
ATOM	16305	OD2	ASP	2445	29.039	5.741	50.030	1.00	23.26
ATOM	16306	C	ASP	2445	26.531	8.835	51.693	1.00	17.90
ATOM	16307	O	ASP	2445	25.646	8.079	52.095	1.00	12.82
ATOM	16308	N	SER	2446	27.136	9.717	52.493	1.00	16.02
ATOM	16309	CA	SER	2446	26.710	9.842	53.884	1.00	14.42
ATOM	16310	CB	SER	2446	27.556	10.877	54.632	1.00	17.31
ATOM	16311	OG	SER	2446	27.690	12.075	53.886	1.00	19.20
ATOM	16312	C	SER	2446	25.260	10.294	53.838	1.00	13.92
ATOM	16313	O	SER	2446	24.510	10.114	54.799	1.00	15.62
ATOM	16314	N	LEU	2447	24.879	10.885	52.706	1.00	13.83
ATOM	16315	CA	LEU	2447	23.511	11.366	52.490	1.00	15.03
ATOM	16316	CB	LEU	2447	23.383	12.005	51.095	1.00	13.29
ATOM	16317	CG	LEU	2447	23.435	11.139	49.828	1.00	14.14
ATOM	16318	CD1	LEU	2447	22.038	10.529	49.557	1.00	14.78
ATOM	16319	CD2	LEU	2447	23.856	11.983	48.647	1.00	14.51
ATOM	16320	C	LEU	2447	22.505	10.232	52.636	1.00	16.55
ATOM	16321	O	LEU	2447	21.325	10.464	52.923	1.00	16.84
ATOM	16322	N	GLY	2448	22.974	9.003	52.433	1.00	14.34
ATOM	16323	CA	GLY	2448	22.092	7.856	52.549	1.00	16.03
ATOM	16324	C	GLY	2448	21.544	7.753	53.952	1.00	16.17
ATOM	16325	O	GLY	2448	20.468	7.212	54.170	1.00	14.30
ATOM	16326	N	MET	2449	22.290	8.287	54.910	1.00	16.60
ATOM	16327	CA	MET	2449	21.872	8.245	56.292	1.00	16.34
ATOM	16328	CB	MET	2449	23.056	7.814	57.157	1.00	19.82
ATOM	16329	CG	MET	2449	23.644	6.484	56.710	1.00	21.64
ATOM	16330	SD	MET	2449	24.990	5.908	57.750	1.00	24.22
ATOM	16331	CE	MET	2449	24.077	5.356	59.175	1.00	25.30
ATOM	16332	C	MET	2449	21.337	9.602	56.739	1.00	17.00
ATOM	16333	O	MET	2449	20.194	9.710	57.177	1.00	17.40
ATOM	16334	N	THR	2450	22.158	10.636	56.599	1.00	16.35
ATOM	16335	CA	THR	2450	21.774	11.980	57.007	1.00	18.67
ATOM	16336	CB	THR	2450	22.988	12.932	56.910	1.00	20.10
ATOM	16337	OG1	THR	2450	22.658	14.201	57.489	1.00	27.83
ATOM	16338	CG2	THR	2450	23.394	13.137	55.468	1.00	22.03
ATOM	16339	C	THR	2450	20.588	12.575	56.235	1.00	18.18
ATOM	16340	O	THR	2450	19.764	13.287	56.808	1.00	16.73
ATOM	16341	N	VAL	2451	20.487	12.277	54.943	1.00	16.56
ATOM	16342	CA	VAL	2451	19.388	12.809	54.138	1.00	15.70
ATOM	16343	CB	VAL	2451	19.904	13.319	52.771	1.00	16.21
ATOM	16344	CG1	VAL	2451	18.737	13.687	51.857	1.00	18.82
ATOM	16345	CG2	VAL	2451	20.794	14.531	52.983	1.00	18.81
ATOM	16346	C	VAL	2451	18.245	11.820	53.906	1.00	15.14
ATOM	16347	O	VAL	2451	17.073	12.131	54.168	1.00	13.37
ATOM	16348	N	GLN	2452	18.580	10.631	53.415	1.00	14.84
ATOM	16349	CA	GLN	2452	17.573	9.605	53.135	1.00	15.81
ATOM	16350	CB	GLN	2452	18.130	8.588	52.137	1.00	11.46
ATOM	16351	CG	GLN	2452	18.666	9.217	50.868	1.00	14.21
ATOM	16352	CD	GLN	2452	19.187	8.181	49.893	1.00	10.70

ATOM	16353	OE1	GLN	2452	19.456	7.044	50.279	1.00	14.39
ATOM	16354	NE2	GLN	2452	19.335	8.568	48.627	1.00	12.31
ATOM	16355	C	GLN	2452	17.071	8.883	54.376	1.00	15.31
ATOM	16356	O	GLN	2452	15.931	8.424	54.412	1.00	16.95
ATOM	16357	N	GLY	2453	17.919	8.760	55.392	1.00	16.51
ATOM	16358	CA	GLY	2453	17.480	8.111	56.619	1.00	17.32
ATOM	16359	C	GLY	2453	17.695	6.616	56.735	1.00	16.27
ATOM	16360	O	GLY	2453	17.069	5.961	57.567	1.00	15.67
ATOM	16361	N	HIS	2454	18.576	6.070	55.903	1.00	17.26
ATOM	16362	CA	HIS	2454	18.878	4.638	55.945	1.00	16.67
ATOM	16363	CB	HIS	2454	19.485	4.188	54.616	1.00	16.80
ATOM	16364	CG	HIS	2454	18.521	4.210	53.477	1.00	17.61
ATOM	16365	CD2	HIS	2454	18.472	4.977	52.363	1.00	17.85
ATOM	16366	ND1	HIS	2454	17.454	3.344	53.396	1.00	16.86
ATOM	16367	CE1	HIS	2454	16.790	3.573	52.278	1.00	19.45
ATOM	16368	NE2	HIS	2454	17.387	4.559	51.633	1.00	18.52
ATOM	16369	C	HIS	2454	19.873	4.349	57.062	1.00	17.34
ATOM	16370	O	HIS	2454	20.558	5.255	57.533	1.00	18.36
ATOM	16371	N	ASP	2455	19.945	3.084	57.475	1.00	18.16
ATOM	16372	CA	ASP	2455	20.858	2.646	58.531	1.00	21.37
ATOM	16373	CB	ASP	2455	20.435	1.270	59.074	1.00	25.85
ATOM	16374	CG	ASP	2455	20.380	0.193	57.991	1.00	30.92
ATOM	16375	OD1	ASP	2455	21.371	0.020	57.251	1.00	33.11
ATOM	16376	OD2	ASP	2455	19.344	-0.496	57.883	1.00	35.21
ATOM	16377	C	ASP	2455	22.315	2.561	58.061	1.00	20.40
ATOM	16378	O	ASP	2455	23.214	2.291	58.857	1.00	22.38
ATOM	16379	N	SER	2456	22.542	2.782	56.775	1.00	19.74
ATOM	16380	CA	SER	2456	23.885	2.725	56.216	1.00	19.12
ATOM	16381	CB	SER	2456	24.308	1.266	55.985	1.00	20.10
ATOM	16382	OG	SER	2456	23.643	0.697	54.870	1.00	21.89
ATOM	16383	C	SER	2456	23.918	3.497	54.905	1.00	17.48
ATOM	16384	O	SER	2456	22.893	3.985	54.440	1.00	17.06
ATOM	16385	N	THR	2457	25.101	3.616	54.312	1.00	14.78
ATOM	16386	CA	THR	2457	25.245	4.342	53.057	1.00	13.35
ATOM	16387	CB	THR	2457	26.641	4.990	52.951	1.00	14.64
ATOM	16388	OG1	THR	2457	27.623	3.973	52.751	1.00	14.31
ATOM	16389	CG2	THR	2457	26.984	5.744	54.237	1.00	15.15
ATOM	16390	C	THR	2457	25.050	3.469	51.816	1.00	12.59
ATOM	16391	O	THR	2457	24.984	3.980	50.700	1.00	14.58
ATOM	16392	N	LEU	2458	24.977	2.158	52.008	1.00	13.46
ATOM	16393	CA	LEU	2458	24.836	1.230	50.880	1.00	15.15
ATOM	16394	CB	LEU	2458	24.789	-0.210	51.399	1.00	16.30
ATOM	16395	CG	LEU	2458	26.150	-0.857	51.711	1.00	18.84
ATOM	16396	CD1	LEU	2458	26.834	-0.141	52.881	1.00	18.45
ATOM	16397	CD2	LEU	2458	25.933	-2.323	52.036	1.00	19.18
ATOM	16398	C	LEU	2458	23.682	1.454	49.894	1.00	16.48
ATOM	16399	O	LEU	2458	23.853	1.265	48.690	1.00	16.20
ATOM	16400	N	PRO	2459	22.496	1.843	50.388	1.00	17.41
ATOM	16401	CD	PRO	2459	22.096	1.948	51.801	1.00	17.56
ATOM	16402	CA	PRO	2459	21.352	2.073	49.494	1.00	16.65
ATOM	16403	CB	PRO	2459	20.189	2.296	50.468	1.00	19.49
ATOM	16404	CG	PRO	2459	20.870	2.806	51.710	1.00	23.52
ATOM	16405	C	PRO	2459	21.524	3.224	48.504	1.00	16.06
ATOM	16406	O	PRO	2459	20.800	3.311	47.511	1.00	13.44
ATOM	16407	N	VAL	2460	22.486	4.105	48.766	1.00	13.48
ATOM	16408	CA	VAL	2460	22.725	5.239	47.882	1.00	14.40
ATOM	16409	CB	VAL	2460	23.795	6.192	48.450	1.00	14.61
ATOM	16410	CG1	VAL	2460	24.065	7.299	47.458	1.00	14.36
ATOM	16411	CG2	VAL	2460	23.329	6.762	49.780	1.00	13.84
ATOM	16412	C	VAL	2460	23.201	4.789	46.511	1.00	15.33
ATOM	16413	O	VAL	2460	24.202	4.080	46.397	1.00	14.73
ATOM	16414	N	THR	2461	22.495	5.195	45.466	1.00	16.85
ATOM	16415	CA	THR	2461	22.921	4.803	44.139	1.00	19.10
ATOM	16416	CB	THR	2461	21.798	3.984	43.403	1.00	24.26
ATOM	16417	OG1	THR	2461	20.513	4.292	43.952	1.00	25.02
ATOM	16418	CG2	THR	2461	22.022	2.478	43.616	1.00	25.84
ATOM	16419	C	THR	2461	23.450	6.011	43.351	1.00	18.53
ATOM	16420	O	THR	2461	23.338	7.153	43.802	1.00	17.30
ATOM	16421	N	VAL	2462	24.074	5.758	42.207	1.00	16.22
ATOM	16422	CA	VAL	2462	24.651	6.823	41.392	1.00	16.40
ATOM	16423	CB	VAL	2462	25.214	6.253	40.072	1.00	15.77
ATOM	16424	CG1	VAL	2462	25.794	7.369	39.219	1.00	15.65
ATOM	16425	CG2	VAL	2462	26.275	5.213	40.385	1.00	18.55
ATOM	16426	C	VAL	2462	23.679	7.951	41.057	1.00	16.36
ATOM	16427	O	VAL	2462	24.061	9.127	41.020	1.00	16.32
ATOM	16428	N	ALA	2463	22.425	7.594	40.804	1.00	14.77
ATOM	16429	CA	ALA	2463	21.417	8.586	40.475	1.00	15.24

ATOM	16430	CB	ALA	2463	20.100	7.900	40.118	1.00	17.40
ATOM	16431	C	ALA	2463	21.211	9.540	41.647	1.00	15.53
ATOM	16432	O	ALA	2463	20.998	10.737	41.448	1.00	17.50
ATOM	16433	N	ASP	2464	21.260	9.009	42.864	1.00	15.85
ATOM	16434	CA	ASP	2464	21.096	9.837	44.051	1.00	15.44
ATOM	16435	CB	ASP	2464	21.161	8.999	45.338	1.00	15.36
ATOM	16436	CG	ASP	2464	19.964	8.076	45.514	1.00	16.71
ATOM	16437	OD1	ASP	2464	18.885	8.353	44.930	1.00	13.53
ATOM	16438	OD2	ASP	2464	20.110	7.088	46.266	1.00	15.10
ATOM	16439	C	ASP	2464	22.229	10.859	44.078	1.00	15.31
ATOM	16440	O	ASP	2464	22.000	12.058	44.249	1.00	14.61
ATOM	16441	N	ILE	2465	23.460	10.384	43.910	1.00	14.73
ATOM	16442	CA	ILE	2465	24.613	11.283	43.928	1.00	14.21
ATOM	16443	CB	ILE	2465	25.937	10.504	43.708	1.00	14.08
ATOM	16444	CG2	ILE	2465	27.104	11.484	43.609	1.00	12.92
ATOM	16445	CG1	ILE	2465	26.159	9.511	44.861	1.00	11.78
ATOM	16446	CD1	ILE	2465	26.437	10.163	46.224	1.00	16.30
ATOM	16447	C	ILE	2465	24.482	12.377	42.867	1.00	14.68
ATOM	16448	O	ILE	2465	24.675	13.556	43.159	1.00	15.78
ATOM	16449	N	ALA	2466	24.137	11.995	41.642	1.00	13.89
ATOM	16450	CA	ALA	2466	23.993	12.960	40.551	1.00	14.00
ATOM	16451	CB	ALA	2466	23.631	12.229	39.246	1.00	13.36
ATOM	16452	C	ALA	2466	22.942	14.027	40.849	1.00	14.38
ATOM	16453	O	ALA	2466	23.082	15.179	40.445	1.00	16.13
ATOM	16454	N	TYR	2467	21.871	13.620	41.518	1.00	15.16
ATOM	16455	CA	TYR	2467	20.792	14.527	41.874	1.00	14.44
ATOM	16456	CB	TYR	2467	19.660	13.744	42.536	1.00	15.27
ATOM	16457	CG	TYR	2467	18.537	14.592	43.094	1.00	16.93
ATOM	16458	CD1	TYR	2467	17.661	15.271	42.252	1.00	17.28
ATOM	16459	CE1	TYR	2467	16.603	16.016	42.765	1.00	17.30
ATOM	16460	CD2	TYR	2467	18.331	14.680	44.471	1.00	17.80
ATOM	16461	CE2	TYR	2467	17.281	15.419	45.000	1.00	17.99
ATOM	16462	CZ	TYR	2467	16.415	16.084	44.143	1.00	19.01
ATOM	16463	OH	TYR	2467	15.355	16.787	44.665	1.00	16.68
ATOM	16464	C	TYR	2467	21.293	15.606	42.833	1.00	12.99
ATOM	16465	O	TYR	2467	21.094	16.799	42.605	1.00	14.73
ATOM	16466	N	HIS	2468	21.942	15.180	43.905	1.00	13.09
ATOM	16467	CA	HIS	2468	22.450	16.117	44.897	1.00	14.34
ATOM	16468	CB	HIS	2468	22.822	15.360	46.174	1.00	13.15
ATOM	16469	CG	HIS	2468	21.632	14.846	46.924	1.00	17.11
ATOM	16470	CD2	HIS	2468	21.090	13.606	46.999	1.00	17.53
ATOM	16471	ND1	HIS	2468	20.797	15.671	47.649	1.00	15.01
ATOM	16472	CE1	HIS	2468	19.792	14.963	48.134	1.00	17.40
ATOM	16473	NE2	HIS	2468	19.945	13.707	47.753	1.00	18.53
ATOM	16474	C	HIS	2468	23.626	16.936	44.378	1.00	15.33
ATOM	16475	O	HIS	2468	23.834	18.069	44.803	1.00	14.82
ATOM	16476	N	THR	2469	24.391	16.366	43.452	1.00	15.33
ATOM	16477	CA	THR	2469	25.527	17.073	42.873	1.00	16.60
ATOM	16478	CB	THR	2469	26.348	16.132	41.968	1.00	16.20
ATOM	16479	OG1	THR	2469	27.046	15.184	42.785	1.00	17.12
ATOM	16480	CG2	THR	2469	27.352	16.919	41.134	1.00	14.14
ATOM	16481	C	THR	2469	25.066	18.298	42.078	1.00	16.62
ATOM	16482	O	THR	2469	25.631	19.387	42.215	1.00	18.28
ATOM	16483	N	ALA	2470	24.034	18.122	41.256	1.00	17.01
ATOM	16484	CA	ALA	2470	23.508	19.222	40.461	1.00	16.73
ATOM	16485	CB	ALA	2470	22.383	18.726	39.549	1.00	18.75
ATOM	16486	C	ALA	2470	22.992	20.320	41.391	1.00	17.94
ATOM	16487	O	ALA	2470	23.185	21.505	41.125	1.00	18.99
ATOM	16488	N	ALA	2471	22.342	19.921	42.479	1.00	17.24
ATOM	16489	CA	ALA	2471	21.807	20.875	43.445	1.00	19.28
ATOM	16490	CB	ALA	2471	21.024	20.137	44.529	1.00	18.10
ATOM	16491	C	ALA	2471	22.921	21.705	44.083	1.00	20.30
ATOM	16492	O	ALA	2471	22.814	22.927	44.191	1.00	22.29
ATOM	16493	N	VAL	2472	23.987	21.036	44.510	1.00	21.49
ATOM	16494	CA	VAL	2472	25.126	21.708	45.144	1.00	20.58
ATOM	16495	CB	VAL	2472	26.149	20.670	45.669	1.00	20.42
ATOM	16496	CG1	VAL	2472	27.441	21.359	46.104	1.00	18.63
ATOM	16497	CG2	VAL	2472	25.543	19.901	46.832	1.00	17.07
ATOM	16498	C	VAL	2472	25.829	22.656	44.178	1.00	21.47
ATOM	16499	O	VAL	2472	26.220	23.763	44.552	1.00	20.66
ATOM	16500	N	ARG	2473	26.000	22.215	42.938	1.00	20.73
ATOM	16501	CA	ARG	2473	26.651	23.043	41.939	1.00	20.95
ATOM	16502	CB	ARG	2473	26.805	22.273	40.622	1.00	21.67
ATOM	16503	CG	ARG	2473	27.384	23.113	39.490	1.00	23.02
ATOM	16504	CD	ARG	2473	28.729	23.711	39.889	1.00	23.89
ATOM	16505	NE	ARG	2473	29.797	22.724	39.904	1.00	23.45
ATOM	16506	CZ	ARG	2473	30.932	22.858	40.584	1.00	26.20

ATOM	16507	NH1	ARG	2473	31.148	23.941	41.320	1.00	24.63
ATOM	16508	NH2	ARG	2473	31.864	21.915	40.515	1.00	21.81
ATOM	16509	C	ARG	2473	25.857	24.326	41.699	1.00	22.12
ATOM	16510	O	ARG	2473	26.437	25.398	41.529	1.00	23.41
ATOM	16511	N	ARG	2474	24.532	24.229	41.684	1.00	20.61
ATOM	16512	CA	ARG	2474	23.728	25.424	41.459	1.00	22.05
ATOM	16513	CB	ARG	2474	22.237	25.075	41.369	1.00	23.15
ATOM	16514	CG	ARG	2474	21.883	24.197	40.178	1.00	25.72
ATOM	16515	CD	ARG	2474	20.381	24.163	39.933	1.00	26.31
ATOM	16516	NE	ARG	2474	20.023	23.166	38.930	1.00	29.12
ATOM	16517	CZ	ARG	2474	19.951	21.859	39.159	1.00	30.89
ATOM	16518	NH1	ARG	2474	20.205	21.375	40.370	1.00	31.05
ATOM	16519	NH2	ARG	2474	19.638	21.030	38.168	1.00	29.85
ATOM	16520	C	ARG	2474	23.958	26.446	42.571	1.00	21.79
ATOM	16521	O	ARG	2474	23.888	27.651	42.337	1.00	19.95
ATOM	16522	N	GLY	2475	24.249	25.959	43.772	1.00	21.36
ATOM	16523	CA	GLY	2475	24.487	26.853	44.889	1.00	23.25
ATOM	16524	C	GLY	2475	25.922	27.337	44.982	1.00	23.98
ATOM	16525	O	GLY	2475	26.186	28.396	45.552	1.00	23.43
ATOM	16526	N	ALA	2476	26.849	26.568	44.418	1.00	23.91
ATOM	16527	CA	ALA	2476	28.264	26.920	44.447	1.00	25.38
ATOM	16528	CB	ALA	2476	28.948	26.219	45.616	1.00	25.54
ATOM	16529	C	ALA	2476	28.930	26.517	43.134	1.00	26.02
ATOM	16530	O	ALA	2476	29.616	25.498	43.066	1.00	27.80
ATOM	16531	N	PRO	2477	28.741	27.319	42.074	1.00	26.85
ATOM	16532	CD	PRO	2477	27.952	28.563	42.035	1.00	28.05
ATOM	16533	CA	PRO	2477	29.322	27.038	40.757	1.00	29.05
ATOM	16534	CB	PRO	2477	28.607	28.035	39.853	1.00	28.77
ATOM	16535	CG	PRO	2477	28.429	29.204	40.748	1.00	29.67
ATOM	16536	C	PRO	2477	30.839	27.159	40.664	1.00	29.31
ATOM	16537	O	PRO	2477	31.441	26.680	39.706	1.00	30.76
ATOM	16538	N	ASN	2478	31.453	27.788	41.661	1.00	30.39
ATOM	16539	CA	ASN	2478	32.897	27.974	41.655	1.00	29.62
ATOM	16540	CB	ASN	2478	33.229	29.453	41.881	1.00	30.92
ATOM	16541	CG	ASN	2478	32.571	30.360	40.858	1.00	31.62
ATOM	16542	OD1	ASN	2478	32.859	30.284	39.665	1.00	33.22
ATOM	16543	ND2	ASN	2478	31.667	31.215	41.322	1.00	34.26
ATOM	16544	C	ASN	2478	33.616	27.128	42.695	1.00	28.50
ATOM	16545	O	ASN	2478	34.828	27.231	42.842	1.00	29.41
ATOM	16546	N	CYS	2479	32.877	26.280	43.402	1.00	27.76
ATOM	16547	CA	CYS	2479	33.487	25.444	44.428	1.00	24.78
ATOM	16548	CB	CYS	2479	32.444	25.031	45.475	1.00	25.50
ATOM	16549	SG	CYS	2479	31.459	23.551	45.037	1.00	26.02
ATOM	16550	C	CYS	2479	34.122	24.188	43.845	1.00	24.27
ATOM	16551	O	CYS	2479	33.787	23.760	42.740	1.00	23.85
ATOM	16552	N	LEU	2480	35.065	23.616	44.589	1.00	22.97
ATOM	16553	CA	LEU	2480	35.697	22.375	44.175	1.00	22.48
ATOM	16554	CB	LEU	2480	37.062	22.189	44.852	1.00	22.33
ATOM	16555	CG	LEU	2480	37.763	20.855	44.584	1.00	23.00
ATOM	16556	CD1	LEU	2480	37.990	20.684	43.095	1.00	23.31
ATOM	16557	CD2	LEU	2480	39.087	20.787	45.335	1.00	22.05
ATOM	16558	C	LEU	2480	34.693	21.342	44.680	1.00	21.39
ATOM	16559	O	LEU	2480	34.571	21.114	45.884	1.00	20.80
ATOM	16560	N	LEU	2481	33.960	20.739	43.749	1.00	20.74
ATOM	16561	CA	LEU	2481	32.926	19.772	44.089	1.00	19.90
ATOM	16562	CB	LEU	2481	31.684	20.025	43.217	1.00	21.31
ATOM	16563	CG	LEU	2481	30.295	19.607	43.726	1.00	24.25
ATOM	16564	CD1	LEU	2481	29.231	20.182	42.806	1.00	24.77
ATOM	16565	CD2	LEU	2481	30.184	18.094	43.805	1.00	25.65
ATOM	16566	C	LEU	2481	33.384	18.328	43.931	1.00	20.50
ATOM	16567	O	LEU	2481	33.681	17.875	42.824	1.00	20.28
ATOM	16568	N	LEU	2482	33.451	17.613	45.046	1.00	19.62
ATOM	16569	CA	LEU	2482	33.844	16.211	45.030	1.00	19.59
ATOM	16570	CB	LEU	2482	34.776	15.889	46.198	1.00	19.36
ATOM	16571	CG	LEU	2482	36.249	16.304	46.107	1.00	21.46
ATOM	16572	CD1	LEU	2482	36.385	17.805	45.908	1.00	24.55
ATOM	16573	CD2	LEU	2482	36.947	15.854	47.372	1.00	19.98
ATOM	16574	C	LEU	2482	32.569	15.397	45.178	1.00	19.82
ATOM	16575	O	LEU	2482	31.701	15.752	45.972	1.00	21.78
ATOM	16576	N	ALA	2483	32.432	14.323	44.411	1.00	16.25
ATOM	16577	CA	ALA	2483	31.240	13.493	44.541	1.00	16.04
ATOM	16578	CB	ALA	2483	30.348	13.636	43.323	1.00	15.47
ATOM	16579	C	ALA	2483	31.678	12.051	44.714	1.00	14.99
ATOM	16580	O	ALA	2483	32.594	11.591	44.039	1.00	14.48
ATOM	16581	N	ASP	2484	31.033	11.346	45.636	1.00	14.00
ATOM	16582	CA	ASP	2484	31.363	9.952	45.907	1.00	16.62
ATOM	16583	CB	ASP	2484	30.819	9.508	47.265	1.00	18.12

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ATOM  16584  CG   ASP  2484      31.751   9.800  48.420  1.00 21.09
ATOM  16585  OD1  ASP  2484      32.952  10.027  48.201  1.00 23.51
ATOM  16586  OD2  ASP  2484      31.259   9.765  49.567  1.00 25.92
ATOM  16587  C    ASP  2484      30.751   8.990  44.906  1.00 16.88
ATOM  16588  O    ASP  2484      29.679   9.252  44.362  1.00 17.02
ATOM  16589  N    LEU  2485      31.437   7.878  44.664  1.00 16.05
ATOM  16590  CA   LEU  2485      30.856   6.828  43.837  1.00 16.81
ATOM  16591  CB   LEU  2485      31.887   6.120  42.968  1.00 17.36
ATOM  16592  CG   LEU  2485      32.362   6.967  41.791  1.00 18.54
ATOM  16593  CD1  LEU  2485      33.158   6.088  40.829  1.00 19.06
ATOM  16594  CD2  LEU  2485      31.157   7.568  41.072  1.00 18.74
ATOM  16595  C    LEU  2485      30.367   5.900  44.936  1.00 15.90
ATOM  16596  O    LEU  2485      31.145   5.447  45.773  1.00 16.45
ATOM  16597  N    PRO  2486      29.057   5.638  44.970  1.00 17.02
ATOM  16598  CD   PRO  2486      28.055   6.209  44.052  1.00 16.98
ATOM  16599  CA   PRO  2486      28.427   4.777  45.968  1.00 15.60
ATOM  16600  CB   PRO  2486      26.937   5.042  45.750  1.00 15.78
ATOM  16601  CG   PRO  2486      26.860   5.312  44.276  1.00 16.02
ATOM  16602  C    PRO  2486      28.778   3.287  45.908  1.00 14.53
ATOM  16603  O    PRO  2486      29.499   2.822  45.025  1.00 14.20
ATOM  16604  N    PHE  2487      28.267   2.559  46.890  1.00 14.83
ATOM  16605  CA   PHE  2487      28.469   1.125  47.011  1.00 15.84
ATOM  16606  CB   PHE  2487      27.501   0.583  48.074  1.00 15.61
ATOM  16607  CG   PHE  2487      27.356  -0.919  48.083  1.00 17.92
ATOM  16608  CD1  PHE  2487      28.450  -1.746  48.328  1.00 16.77
ATOM  16609  CD2  PHE  2487      26.106  -1.504  47.874  1.00 15.14
ATOM  16610  CE1  PHE  2487      28.302  -3.131  48.369  1.00 18.81
ATOM  16611  CE2  PHE  2487      25.948  -2.887  47.913  1.00 18.55
ATOM  16612  CZ   PHE  2487      27.050  -3.706  48.160  1.00 17.93
ATOM  16613  C    PHE  2487      28.283   0.389  45.676  1.00 16.50
ATOM  16614  O    PHE  2487      27.257   0.535  45.007  1.00 15.22
ATOM  16615  N    MET  2488      29.297  -0.390  45.302  1.00 16.30
ATOM  16616  CA   MET  2488      29.305  -1.193  44.077  1.00 16.43
ATOM  16617  CB   MET  2488      28.265  -2.320  44.174  1.00 17.44
ATOM  16618  CG   MET  2488      28.596  -3.554  43.353  1.00 17.50
ATOM  16619  SD   MET  2488      30.158  -4.247  43.921  1.00 15.86
ATOM  16620  CE   MET  2488      29.646  -5.320  45.243  1.00 15.24
ATOM  16621  C    MET  2488      29.084  -0.384  42.804  1.00 18.13
ATOM  16622  O    MET  2488      28.516  -0.882  41.827  1.00 17.92
ATOM  16623  N    ALA  2489      29.547   0.862  42.810  1.00 15.73
ATOM  16624  CA   ALA  2489      29.417   1.732  41.643  1.00 16.90
ATOM  16625  CB   ALA  2489      28.963   3.133  42.074  1.00 15.45
ATOM  16626  C    ALA  2489      30.750   1.807  40.891  1.00 14.87
ATOM  16627  O    ALA  2489      30.887   2.539  39.916  1.00 16.09
ATOM  16628  N    TYR  2490      31.731   1.040  41.352  1.00 16.77
ATOM  16629  CA   TYR  2490      33.043   1.000  40.705  1.00 16.61
ATOM  16630  CB   TYR  2490      33.978   2.071  41.293  1.00 17.08
ATOM  16631  CG   TYR  2490      34.015   2.131  42.812  1.00 19.16
ATOM  16632  CD1  TYR  2490      35.039   1.521  43.538  1.00 18.38
ATOM  16633  CE1  TYR  2490      35.062   1.572  44.939  1.00 18.54
ATOM  16634  CD2  TYR  2490      33.011   2.795  43.519  1.00 20.42
ATOM  16635  CE2  TYR  2490      33.017   2.855  44.907  1.00 20.22
ATOM  16636  CZ   TYR  2490      34.042   2.244  45.613  1.00 21.20
ATOM  16637  OH   TYR  2490      34.038   2.326  46.990  1.00 19.10
ATOM  16638  C    TYR  2490      33.652  -0.390  40.875  1.00 16.36
ATOM  16639  O    TYR  2490      34.842  -0.532  41.154  1.00 15.49
ATOM  16640  N    ALA  2491      32.821  -1.413  40.687  1.00 15.34
ATOM  16641  CA   ALA  2491      33.240  -2.806  40.845  1.00 16.21
ATOM  16642  CB   ALA  2491      32.016  -3.716  40.865  1.00 16.00
ATOM  16643  C    ALA  2491      34.218  -3.256  39.765  1.00 16.41
ATOM  16644  O    ALA  2491      34.948  -4.229  39.945  1.00 16.54
ATOM  16645  N    THR  2492      34.196  -2.571  38.631  1.00 16.89
ATOM  16646  CA   THR  2492      35.127  -2.863  37.544  1.00 18.84
ATOM  16647  CB   THR  2492      34.507  -3.747  36.423  1.00 17.42
ATOM  16648  OG1  THR  2492      33.628  -2.948  35.619  1.00 19.01
ATOM  16649  CG2  THR  2492      33.753  -4.919  37.015  1.00 16.56
ATOM  16650  C    THR  2492      35.476  -1.517  36.939  1.00 19.20
ATOM  16651  O    THR  2492      34.705  -0.563  37.040  1.00 17.78
ATOM  16652  N    PRO  2493      36.655  -1.416  36.316  1.00 20.58
ATOM  16653  CD   PRO  2493      37.710  -2.440  36.217  1.00 22.28
ATOM  16654  CA   PRO  2493      37.080  -0.163  35.696  1.00 21.26
ATOM  16655  CB   PRO  2493      38.359  -0.561  34.968  1.00 22.19
ATOM  16656  CG   PRO  2493      38.925  -1.615  35.861  1.00 22.73
ATOM  16657  C    PRO  2493      36.031   0.379  34.737  1.00 21.17
ATOM  16658  O    PRO  2493      35.718   1.567  34.752  1.00 20.07
ATOM  16659  N    GLU  2494      35.477  -0.497  33.906  1.00 21.51
ATOM  16660  CA   GLU  2494      34.485  -0.062  32.934  1.00 22.98
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ATOM   16661  CB   GLU   2494      34.027   -1.249   32.078   1.00  27.93
ATOM   16662  CG   GLU   2494      33.193   -0.865   30.862   1.00  35.30
ATOM   16663  CD   GLU   2494      33.127   -1.979   29.825   1.00  39.26
ATOM   16664  OE1  GLU   2494      32.813   -3.129   30.207   1.00  40.58
ATOM   16665  OE2  GLU   2494      33.381   -1.701   28.629   1.00  41.62
ATOM   16666  C    GLU   2494      33.296    0.596   33.629   1.00  21.02
ATOM   16667  O    GLU   2494      32.867    1.674   33.236   1.00  20.30
ATOM   16668  N    GLN   2495      32.768   -0.043   34.663   1.00  19.92
ATOM   16669  CA   GLN   2495      31.638    0.536   35.377   1.00  21.90
ATOM   16670  CB   GLN   2495      31.103   -0.446   36.411   1.00  25.01
ATOM   16671  CG   GLN   2495      30.627   -1.747   35.803   1.00  32.47
ATOM   16672  CD   GLN   2495      29.946   -2.626   36.814   1.00  34.62
ATOM   16673  OE1  GLN   2495      28.836   -2.332   37.259   1.00  37.69
ATOM   16674  NE2  GLN   2495      30.614   -3.707   37.202   1.00  39.43
ATOM   16675  C    GLN   2495      32.044    1.835   36.056   1.00  18.71
ATOM   16676  O    GLN   2495      31.269    2.788   36.101   1.00  16.24
ATOM   16677  N    ALA   2496      33.263    1.870   36.583   1.00  18.87
ATOM   16678  CA   ALA   2496      33.756    3.073   37.236   1.00  18.29
ATOM   16679  CB   ALA   2496      35.161    2.842   37.789   1.00  19.37
ATOM   16680  C    ALA   2496      33.758    4.249   36.258   1.00  17.83
ATOM   16681  O    ALA   2496      33.373    5.355   36.626   1.00  17.54
ATOM   16682  N    PHE   2497      34.181    4.018   35.014   1.00  17.22
ATOM   16683  CA   PHE   2497      34.215    5.104   34.033   1.00  16.32
ATOM   16684  CB   PHE   2497      34.777    4.639   32.680   1.00  15.77
ATOM   16685  CG   PHE   2497      36.109    3.944   32.763   1.00  16.08
ATOM   16686  CD1  PHE   2497      37.023    4.262   33.763   1.00  17.05
ATOM   16687  CD2  PHE   2497      36.453    2.976   31.822   1.00  19.05
ATOM   16688  CE1  PHE   2497      38.264    3.626   33.831   1.00  18.78
ATOM   16689  CE2  PHE   2497      37.686    2.334   31.876   1.00  18.30
ATOM   16690  CZ   PHE   2497      38.594    2.660   32.885   1.00  19.48
ATOM   16691  C    PHE   2497      32.817    5.659   33.796   1.00  16.99
ATOM   16692  O    PHE   2497      32.616    6.872   33.761   1.00  15.02
ATOM   16693  N    GLU   2498      31.860    4.753   33.624   1.00  17.61
ATOM   16694  CA   GLU   2498      30.474    5.121   33.364   1.00  19.06
ATOM   16695  CB   GLU   2498      29.635    3.854   33.162   1.00  22.66
ATOM   16696  CG   GLU   2498      28.212    4.090   32.676   1.00  28.82
ATOM   16697  CD   GLU   2498      28.165    4.785   31.322   1.00  33.26
ATOM   16698  OE1  GLU   2498      29.130    4.638   30.536   1.00  33.89
ATOM   16699  OE2  GLU   2498      27.156    5.469   31.038   1.00  35.72
ATOM   16700  C    GLU   2498      29.880    5.947   34.499   1.00  18.47
ATOM   16701  O    GLU   2498      29.368    7.049   34.281   1.00  19.38
ATOM   16702  N    ASN   2499      29.954    5.413   35.711   1.00  18.25
ATOM   16703  CA   ASN   2499      29.392    6.105   36.869   1.00  19.15
ATOM   16704  CB   ASN   2499      29.335    5.157   38.070   1.00  19.68
ATOM   16705  CG   ASN   2499      28.385    3.997   37.839   1.00  19.41
ATOM   16706  OD1  ASN   2499      27.309    4.178   37.269   1.00  21.49
ATOM   16707  ND2  ASN   2499      28.767    2.811   38.283   1.00  18.16
ATOM   16708  C    ASN   2499      30.125    7.397   37.225   1.00  19.51
ATOM   16709  O    ASN   2499      29.513    8.347   37.723   1.00  18.86
ATOM   16710  N    ALA   2500      31.429    7.440   36.965   1.00  20.06
ATOM   16711  CA   ALA   2500      32.207    8.641   37.239   1.00  19.16
ATOM   16712  CB   ALA   2500      33.694    8.367   37.043   1.00  19.94
ATOM   16713  C    ALA   2500      31.748    9.734   36.284   1.00  19.10
ATOM   16714  O    ALA   2500      31.472   10.858   36.695   1.00  18.94
ATOM   16715  N    ALA   2501      31.652    9.389   35.004   1.00  17.77
ATOM   16716  CA   ALA   2501      31.229   10.339   33.991   1.00  16.26
ATOM   16717  CB   ALA   2501      31.220    9.670   32.608   1.00  16.19
ATOM   16718  C    ALA   2501      29.850   10.905   34.303   1.00  15.89
ATOM   16719  O    ALA   2501      29.592   12.070   34.028   1.00  18.58
ATOM   16720  N    THR   2502      28.963   10.081   34.862   1.00  16.35
ATOM   16721  CA   THR   2502      27.605   10.524   35.200   1.00  16.80
ATOM   16722  CB   THR   2502      26.731    9.356   35.721   1.00  18.71
ATOM   16723  OG1  THR   2502      26.565    8.386   34.685   1.00  18.62
ATOM   16724  CG2  THR   2502      25.358    9.859   36.148   1.00  18.69
ATOM   16725  C    THR   2502      27.629   11.594   36.281   1.00  16.73
ATOM   16726  O    THR   2502      26.919   12.592   36.204   1.00  16.10
ATOM   16727  N    VAL   2503      28.441   11.355   37.301   1.00  16.73
ATOM   16728  CA   VAL   2503      28.582   12.280   38.416   1.00  19.12
ATOM   16729  CB   VAL   2503      29.336   11.588   39.565   1.00  21.79
ATOM   16730  CG1  VAL   2503      29.985   12.604   40.454   1.00  26.41
ATOM   16731  CG2  VAL   2503      28.365   10.712   40.355   1.00  18.83
ATOM   16732  C    VAL   2503      29.321   13.541   37.962   1.00  18.67
ATOM   16733  O    VAL   2503      29.040   14.649   38.435   1.00  18.94
ATOM   16734  N    MET   2504      30.260   13.362   37.037   1.00  18.34
ATOM   16735  CA   MET   2504      31.026   14.471   36.495   1.00  19.37
ATOM   16736  CB   MET   2504      32.211   13.958   35.669   1.00  22.55
ATOM   16737  CG   MET   2504      33.240   13.157   36.459   1.00  26.75
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ATOM   16738  SD   MET  2504      34.195  14.200  37.555  1.00 33.58
ATOM   16739  CE   MET  2504      35.397  14.833  36.400  1.00 29.91
ATOM   16740  C    MET  2504      30.138  15.357  35.623  1.00 19.08
ATOM   16741  O    MET  2504      30.170  16.573  35.755  1.00 16.51
ATOM   16742  N    ARG  2505      29.341  14.757  34.738  1.00 18.93
ATOM   16743  CA   ARG  2505      28.476  15.553  33.883  1.00 19.02
ATOM   16744  CB   ARG  2505      27.748  14.672  32.853  1.00 19.49
ATOM   16745  CG   ARG  2505      28.673  13.917  31.888  1.00 22.49
ATOM   16746  CD   ARG  2505      27.903  13.299  30.717  1.00 23.75
ATOM   16747  NE   ARG  2505      28.708  12.314  29.985  1.00 25.72
ATOM   16748  CZ   ARG  2505      28.734  11.015  30.268  1.00 24.59
ATOM   16749  NH1  ARG  2505      27.997  10.536  31.261  1.00 22.81
ATOM   16750  NH2  ARG  2505      29.505  10.197  29.569  1.00 26.75
ATOM   16751  C    ARG  2505      27.451  16.298  34.728  1.00 17.69
ATOM   16752  O    ARG  2505      26.955  17.351  34.327  1.00 18.42
ATOM   16753  N    ALA  2506      27.145  15.755  35.902  1.00 17.09
ATOM   16754  CA   ALA  2506      26.164  16.363  36.800  1.00 18.48
ATOM   16755  CB   ALA  2506      25.652  15.325  37.797  1.00 17.12
ATOM   16756  C    ALA  2506      26.713  17.580  37.551  1.00 18.29
ATOM   16757  O    ALA  2506      25.957  18.298  38.208  1.00 18.33
ATOM   16758  N    GLY  2507      28.020  17.807  37.448  1.00 18.55
ATOM   16759  CA   GLY  2507      28.622  18.958  38.098  1.00 19.92
ATOM   16760  C    GLY  2507      29.863  18.732  38.943  1.00 20.81
ATOM   16761  O    GLY  2507      30.537  19.694  39.333  1.00 20.95
ATOM   16762  N    ALA  2508      30.183  17.478  39.238  1.00 20.50
ATOM   16763  CA   ALA  2508      31.354  17.193  40.062  1.00 19.08
ATOM   16764  CB   ALA  2508      31.328  15.748  40.526  1.00 18.45
ATOM   16765  C    ALA  2508      32.669  17.482  39.348  1.00 19.05
ATOM   16766  O    ALA  2508      32.776  17.332  38.134  1.00 18.04
ATOM   16767  N    ASN  2509      33.675  17.899  40.109  1.00 19.09
ATOM   16768  CA   ASN  2509      34.981  18.184  39.529  1.00 18.59
ATOM   16769  CB   ASN  2509      35.627  19.405  40.186  1.00 20.73
ATOM   16770  CG   ASN  2509      34.883  20.679  39.903  1.00 18.72
ATOM   16771  OD1  ASN  2509      34.720  21.074  38.748  1.00 17.99
ATOM   16772  ND2  ASN  2509      34.424  21.338  40.957  1.00 18.40
ATOM   16773  C    ASN  2509      35.905  17.000  39.756  1.00 19.28
ATOM   16774  O    ASN  2509      36.841  16.777  38.992  1.00 18.91
ATOM   16775  N    MET  2510      35.626  16.246  40.812  1.00 17.99
ATOM   16776  CA   MET  2510      36.448  15.115  41.203  1.00 19.45
ATOM   16777  CB   MET  2510      37.466  15.577  42.251  1.00 18.97
ATOM   16778  CG   MET  2510      38.433  14.524  42.759  1.00 23.50
ATOM   16779  SD   MET  2510      39.624  15.270  43.945  1.00 23.85
ATOM   16780  CE   MET  2510      41.036  15.618  42.863  1.00 24.62
ATOM   16781  C    MET  2510      35.576  14.020  41.784  1.00 20.19
ATOM   16782  O    MET  2510      34.505  14.289  42.327  1.00 18.96
ATOM   16783  N    VAL  2511      36.047  12.783  41.665  1.00 21.32
ATOM   16784  CA   VAL  2511      35.321  11.626  42.156  1.00 20.08
ATOM   16785  CB   VAL  2511      35.189  10.586  41.023  1.00 23.58
ATOM   16786  CG1  VAL  2511      34.622   9.304  41.560  1.00 26.75
ATOM   16787  CG2  VAL  2511      34.316  11.146  39.908  1.00 23.78
ATOM   16788  C    VAL  2511      36.035  10.991  43.347  1.00 19.91
ATOM   16789  O    VAL  2511      37.267  10.916  43.369  1.00 18.34
ATOM   16790  N    LYS  2512      35.268  10.547  44.340  1.00 17.54
ATOM   16791  CA   LYS  2512      35.850   9.902  45.513  1.00 18.90
ATOM   16792  CB   LYS  2512      35.473  10.648  46.803  1.00 19.77
ATOM   16793  CG   LYS  2512      36.064   9.979  48.044  1.00 21.40
ATOM   16794  CD   LYS  2512      36.198  10.915  49.233  1.00 23.09
ATOM   16795  CE   LYS  2512      34.908  11.031  50.024  1.00 23.73
ATOM   16796  NZ   LYS  2512      34.461   9.709  50.567  1.00 21.38
ATOM   16797  C    LYS  2512      35.407   8.442  45.620  1.00 19.54
ATOM   16798  O    LYS  2512      34.219   8.137  45.525  1.00 20.01
ATOM   16799  N    ILE  2513      36.370   7.545  45.817  1.00 17.93
ATOM   16800  CA   ILE  2513      36.085   6.117  45.923  1.00 17.40
ATOM   16801  CB   ILE  2513      36.447   5.384  44.607  1.00 17.97
ATOM   16802  CG2  ILE  2513      35.518   5.836  43.489  1.00 17.02
ATOM   16803  CG1  ILE  2513      37.896   5.694  44.213  1.00 18.73
ATOM   16804  CD1  ILE  2513      38.353   4.974  42.946  1.00 18.72
ATOM   16805  C    ILE  2513      36.849   5.491  47.084  1.00 18.41
ATOM   16806  O    ILE  2513      37.994   5.858  47.353  1.00 18.45
ATOM   16807  N    GLU  2514      36.204   4.548  47.765  1.00 18.60
ATOM   16808  CA   GLU  2514      36.776   3.861  48.922  1.00 18.49
ATOM   16809  CB   GLU  2514      35.662   3.542  49.925  1.00 19.81
ATOM   16810  CG   GLU  2514      34.827   4.743  50.360  1.00 20.46
ATOM   16811  CD   GLU  2514      33.621   4.347  51.222  1.00 23.36
ATOM   16812  OE1  GLU  2514      33.542   3.176  51.644  1.00 22.24
ATOM   16813  OE2  GLU  2514      32.760   5.212  51.484  1.00 23.56
ATOM   16814  C    GLU  2514      37.512   2.566  48.571  1.00 19.66
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ATOM	16815	O	GLU	2514	37.045	1.777	47.755	1.00	18.14
ATOM	16816	N	GLY	2515	38.665	2.339	49.189	1.00	20.64
ATOM	16817	CA	GLY	2515	39.389	1.117	48.896	1.00	20.29
ATOM	16818	C	GLY	2515	40.890	1.288	48.808	1.00	19.74
ATOM	16819	O	GLY	2515	41.393	2.371	48.501	1.00	18.88
ATOM	16820	N	GLY	2516	41.602	0.198	49.065	1.00	19.47
ATOM	16821	CA	GLY	2516	43.052	0.224	49.033	1.00	18.59
ATOM	16822	C	GLY	2516	43.687	-0.132	47.703	1.00	18.48
ATOM	16823	O	GLY	2516	43.242	0.303	46.639	1.00	17.54
ATOM	16824	N	GLU	2517	44.725	-0.955	47.769	1.00	20.76
ATOM	16825	CA	GLU	2517	45.467	-1.341	46.580	1.00	23.29
ATOM	16826	CB	GLU	2517	46.637	-2.242	46.974	1.00	27.23
ATOM	16827	CG	GLU	2517	47.689	-2.380	45.888	1.00	32.03
ATOM	16828	CD	GLU	2517	48.937	-3.090	46.367	1.00	36.09
ATOM	16829	OE1	GLU	2517	49.853	-3.300	45.539	1.00	38.84
ATOM	16830	OE2	GLU	2517	49.005	-3.435	47.569	1.00	37.39
ATOM	16831	C	GLU	2517	44.676	-1.992	45.445	1.00	23.15
ATOM	16832	O	GLU	2517	45.079	-1.892	44.286	1.00	22.58
ATOM	16833	N	TRP	2518	43.560	-2.652	45.749	1.00	22.67
ATOM	16834	CA	TRP	2518	42.791	-3.292	44.682	1.00	23.53
ATOM	16835	CB	TRP	2518	41.619	-4.120	45.244	1.00	24.36
ATOM	16836	CG	TRP	2518	40.473	-3.335	45.824	1.00	24.10
ATOM	16837	CD2	TRP	2518	39.271	-2.943	45.143	1.00	23.30
ATOM	16838	CE2	TRP	2518	38.466	-2.252	46.078	1.00	23.70
ATOM	16839	CE3	TRP	2518	38.797	-3.108	43.837	1.00	22.85
ATOM	16840	CD1	TRP	2518	40.352	-2.874	47.107	1.00	25.21
ATOM	16841	NE1	TRP	2518	39.147	-2.226	47.266	1.00	24.49
ATOM	16842	CZ2	TRP	2518	37.209	-1.726	45.745	1.00	22.66
ATOM	16843	CZ3	TRP	2518	37.541	-2.585	43.503	1.00	23.85
ATOM	16844	CH2	TRP	2518	36.765	-1.903	44.456	1.00	20.90
ATOM	16845	C	TRP	2518	42.267	-2.282	43.666	1.00	22.18
ATOM	16846	O	TRP	2518	41.875	-2.651	42.560	1.00	24.23
ATOM	16847	N	LEU	2519	42.283	-1.006	44.042	1.00	21.97
ATOM	16848	CA	LEU	2519	41.804	0.080	43.184	1.00	19.59
ATOM	16849	CB	LEU	2519	41.185	1.180	44.043	1.00	20.80
ATOM	16850	CG	LEU	2519	39.771	0.921	44.553	1.00	20.95
ATOM	16851	CD1	LEU	2519	39.347	2.037	45.517	1.00	20.03
ATOM	16852	CD2	LEU	2519	38.824	0.853	43.358	1.00	19.11
ATOM	16853	C	LEU	2519	42.855	0.724	42.292	1.00	20.90
ATOM	16854	O	LEU	2519	42.525	1.556	41.444	1.00	20.68
ATOM	16855	N	VAL	2520	44.117	0.361	42.483	1.00	19.40
ATOM	16856	CA	VAL	2520	45.186	0.955	41.692	1.00	18.98
ATOM	16857	CB	VAL	2520	46.513	0.172	41.864	1.00	19.23
ATOM	16858	CG1	VAL	2520	47.524	0.629	40.825	1.00	20.17
ATOM	16859	CG2	VAL	2520	47.073	0.413	43.262	1.00	21.65
ATOM	16860	C	VAL	2520	44.870	1.070	40.206	1.00	18.55
ATOM	16861	O	VAL	2520	44.981	2.149	39.630	1.00	18.33
ATOM	16862	N	GLU	2521	44.475	-0.037	39.590	1.00	17.61
ATOM	16863	CA	GLU	2521	44.159	-0.037	38.168	1.00	21.27
ATOM	16864	CB	GLU	2521	43.770	-1.448	37.729	1.00	25.74
ATOM	16865	CG	GLU	2521	43.404	-1.568	36.261	1.00	31.82
ATOM	16866	CD	GLU	2521	43.139	-3.009	35.856	1.00	35.80
ATOM	16867	OE1	GLU	2521	42.203	-3.633	36.408	1.00	37.34
ATOM	16868	OE2	GLU	2521	43.871	-3.520	34.985	1.00	39.34
ATOM	16869	C	GLU	2521	43.037	0.942	37.828	1.00	19.73
ATOM	16870	O	GLU	2521	43.137	1.721	36.879	1.00	18.47
ATOM	16871	N	THR	2522	41.967	0.909	38.611	1.00	18.72
ATOM	16872	CA	THR	2522	40.834	1.789	38.360	1.00	17.06
ATOM	16873	CB	THR	2522	39.696	1.466	39.341	1.00	17.53
ATOM	16874	OG1	THR	2522	39.327	0.087	39.182	1.00	18.32
ATOM	16875	CG2	THR	2522	38.481	2.339	39.074	1.00	16.11
ATOM	16876	C	THR	2522	41.232	3.256	38.469	1.00	17.09
ATOM	16877	O	THR	2522	40.808	4.089	37.668	1.00	16.74
ATOM	16878	N	VAL	2523	42.060	3.580	39.452	1.00	18.90
ATOM	16879	CA	VAL	2523	42.488	4.968	39.614	1.00	18.66
ATOM	16880	CB	VAL	2523	43.295	5.155	40.910	1.00	19.35
ATOM	16881	CG1	VAL	2523	43.779	6.595	41.011	1.00	20.95
ATOM	16882	CG2	VAL	2523	42.442	4.799	42.116	1.00	18.48
ATOM	16883	C	VAL	2523	43.345	5.398	38.419	1.00	18.29
ATOM	16884	O	VAL	2523	43.141	6.476	37.858	1.00	18.36
ATOM	16885	N	GLN	2524	44.309	4.563	38.038	1.00	16.98
ATOM	16886	CA	GLN	2524	45.174	4.894	36.907	1.00	19.97
ATOM	16887	CB	GLN	2524	46.169	3.761	36.626	1.00	21.97
ATOM	16888	CG	GLN	2524	47.125	3.462	37.769	1.00	28.49
ATOM	16889	CD	GLN	2524	48.108	2.355	37.429	1.00	32.31
ATOM	16890	OE1	GLN	2524	47.711	1.273	36.998	1.00	33.90
ATOM	16891	NE2	GLN	2524	49.400	2.619	37.627	1.00	32.72

ATOM	16892	C	GLN	2524	44.359	5.153	35.648	1.00	20.47
ATOM	16893	O	GLN	2524	44.572	6.146	34.950	1.00	19.34
ATOM	16894	N	MET	2525	43.420	4.258	35.360	1.00	19.30
ATOM	16895	CA	MET	2525	42.600	4.385	34.163	1.00	20.94
ATOM	16896	CB	MET	2525	41.853	3.076	33.908	1.00	20.76
ATOM	16897	CG	MET	2525	42.796	1.931	33.555	1.00	22.97
ATOM	16898	SD	MET	2525	41.953	0.379	33.211	1.00	25.66
ATOM	16899	CE	MET	2525	41.613	0.585	31.487	1.00	26.72
ATOM	16900	C	MET	2525	41.638	5.558	34.213	1.00	21.37
ATOM	16901	O	MET	2525	41.439	6.233	33.208	1.00	21.66
ATOM	16902	N	LEU	2526	41.044	5.808	35.375	1.00	21.24
ATOM	16903	CA	LEU	2526	40.129	6.935	35.503	1.00	20.80
ATOM	16904	CB	LEU	2526	39.502	6.964	36.900	1.00	17.52
ATOM	16905	CG	LEU	2526	38.292	6.075	37.149	1.00	16.74
ATOM	16906	CD1	LEU	2526	37.996	6.041	38.641	1.00	15.92
ATOM	16907	CD2	LEU	2526	37.095	6.606	36.373	1.00	16.60
ATOM	16908	C	LEU	2526	40.878	8.241	35.263	1.00	21.12
ATOM	16909	O	LEU	2526	40.404	9.124	34.546	1.00	21.66
ATOM	16910	N	THR	2527	42.059	8.353	35.860	1.00	22.05
ATOM	16911	CA	THR	2527	42.875	9.555	35.725	1.00	24.14
ATOM	16912	CB	THR	2527	44.186	9.419	36.521	1.00	24.39
ATOM	16913	OG1	THR	2527	43.879	9.270	37.914	1.00	27.58
ATOM	16914	CG2	THR	2527	45.061	10.656	36.334	1.00	27.09
ATOM	16915	C	THR	2527	43.217	9.883	34.276	1.00	25.83
ATOM	16916	O	THR	2527	43.061	11.020	33.838	1.00	26.77
ATOM	16917	N	GLU	2528	43.679	8.888	33.529	1.00	27.93
ATOM	16918	CA	GLU	2528	44.042	9.127	32.138	1.00	29.80
ATOM	16919	CB	GLU	2528	44.815	7.935	31.578	1.00	31.80
ATOM	16920	CG	GLU	2528	43.995	6.697	31.350	1.00	32.54
ATOM	16921	CD	GLU	2528	44.836	5.567	30.791	1.00	34.95
ATOM	16922	OE1	GLU	2528	45.737	5.857	29.977	1.00	35.69
ATOM	16923	OE2	GLU	2528	44.599	4.397	31.157	1.00	32.66
ATOM	16924	C	GLU	2528	42.827	9.429	31.265	1.00	28.28
ATOM	16925	O	GLU	2528	42.971	9.896	30.135	1.00	28.14
ATOM	16926	N	ARG	2529	41.634	9.174	31.797	1.00	28.80
ATOM	16927	CA	ARG	2529	40.395	9.431	31.069	1.00	28.26
ATOM	16928	CB	ARG	2529	39.452	8.230	31.205	1.00	26.83
ATOM	16929	CG	ARG	2529	39.946	7.014	30.427	1.00	26.61
ATOM	16930	CD	ARG	2529	39.231	5.732	30.796	1.00	23.98
ATOM	16931	NE	ARG	2529	39.737	4.615	30.003	1.00	24.06
ATOM	16932	CZ	ARG	2529	40.992	4.180	30.041	1.00	25.03
ATOM	16933	NH1	ARG	2529	41.879	4.759	30.838	1.00	23.39
ATOM	16934	NH2	ARG	2529	41.368	3.171	29.270	1.00	24.77
ATOM	16935	C	ARG	2529	39.702	10.713	31.530	1.00	28.54
ATOM	16936	O	ARG	2529	38.478	10.827	31.465	1.00	28.70
ATOM	16937	N	ALA	2530	40.503	11.667	32.001	1.00	28.59
ATOM	16938	CA	ALA	2530	40.018	12.970	32.452	1.00	26.75
ATOM	16939	CB	ALA	2530	39.218	13.637	31.332	1.00	29.24
ATOM	16940	C	ALA	2530	39.196	12.970	33.737	1.00	26.34
ATOM	16941	O	ALA	2530	38.391	13.876	33.953	1.00	25.02
ATOM	16942	N	VAL	2531	39.400	11.974	34.595	1.00	23.38
ATOM	16943	CA	VAL	2531	38.655	11.907	35.849	1.00	23.24
ATOM	16944	CB	VAL	2531	37.802	10.617	35.933	1.00	22.38
ATOM	16945	CG1	VAL	2531	37.001	10.605	37.222	1.00	24.98
ATOM	16946	CG2	VAL	2531	36.874	10.530	34.740	1.00	23.60
ATOM	16947	C	VAL	2531	39.549	11.968	37.089	1.00	22.08
ATOM	16948	O	VAL	2531	40.180	10.979	37.464	1.00	20.71
ATOM	16949	N	PRO	2532	39.618	13.137	37.743	1.00	22.24
ATOM	16950	CD	PRO	2532	38.951	14.412	37.439	1.00	23.52
ATOM	16951	CA	PRO	2532	40.450	13.259	38.944	1.00	22.45
ATOM	16952	CB	PRO	2532	40.414	14.757	39.238	1.00	22.66
ATOM	16953	CG	PRO	2532	39.070	15.148	38.756	1.00	25.65
ATOM	16954	C	PRO	2532	39.836	12.421	40.057	1.00	21.12
ATOM	16955	O	PRO	2532	38.623	12.446	40.255	1.00	21.74
ATOM	16956	N	VAL	2533	40.673	11.678	40.773	1.00	19.42
ATOM	16957	CA	VAL	2533	40.208	10.802	41.837	1.00	18.80
ATOM	16958	CB	VAL	2533	40.670	9.345	41.596	1.00	18.15
ATOM	16959	CG1	VAL	2533	40.209	8.462	42.736	1.00	19.03
ATOM	16960	CG2	VAL	2533	40.134	8.832	40.263	1.00	18.13
ATOM	16961	C	VAL	2533	40.696	11.181	43.220	1.00	18.90
ATOM	16962	O	VAL	2533	41.844	11.587	43.389	1.00	19.13
ATOM	16963	N	CYS	2534	39.813	11.044	44.204	1.00	17.65
ATOM	16964	CA	CYS	2534	40.143	11.296	45.608	1.00	17.23
ATOM	16965	CB	CYS	2534	39.125	12.250	46.259	1.00	16.92
ATOM	16966	SG	CYS	2534	39.435	12.575	48.025	1.00	17.39
ATOM	16967	C	CYS	2534	40.038	9.922	46.265	1.00	17.85
ATOM	16968	O	CYS	2534	39.004	9.258	46.159	1.00	20.42

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ATOM   16969  N    GLY  2535      41.107    9.481   46.917   1.00 16.91
ATOM   16970  CA   GLY  2535      41.084    8.192   47.580   1.00 17.14
ATOM   16971  C    GLY  2535      40.382    8.290   48.921   1.00 18.33
ATOM   16972  O    GLY  2535      40.041    9.388   49.362   1.00 19.66
ATOM   16973  N    HIS  2536      40.168    7.149   49.568   1.00 17.24
ATOM   16974  CA   HIS  2536      39.504    7.106   50.869   1.00 18.82
ATOM   16975  CB   HIS  2536      37.980    7.162   50.683   1.00 20.25
ATOM   16976  CG   HIS  2536      37.207    7.331   51.956   1.00 18.55
ATOM   16977  CD2  HIS  2536      37.537    7.091   53.248   1.00 19.79
ATOM   16978  ND1  HIS  2536      35.897    7.761   51.971   1.00 20.89
ATOM   16979  CE1  HIS  2536      35.453    7.777   53.215   1.00 19.89
ATOM   16980  NE2  HIS  2536      36.428    7.373   54.010   1.00 20.24
ATOM   16981  C    HIS  2536      39.922    5.823   51.575   1.00 18.66
ATOM   16982  O    HIS  2536      39.620    4.717   51.123   1.00 19.56
ATOM   16983  N    LEU  2537      40.639    5.984   52.680   1.00 18.70
ATOM   16984  CA   LEU  2537      41.127    4.855   53.455   1.00 17.87
ATOM   16985  CB   LEU  2537      42.650    4.771   53.338   1.00 19.01
ATOM   16986  CG   LEU  2537      43.229    4.387   51.973   1.00 16.20
ATOM   16987  CD1  LEU  2537      44.757    4.537   51.995   1.00 16.71
ATOM   16988  CD2  LEU  2537      42.851    2.929   51.653   1.00 17.55
ATOM   16989  C    LEU  2537      40.737    4.977   54.926   1.00 19.09
ATOM   16990  O    LEU  2537      40.273    6.026   55.371   1.00 20.25
ATOM   16991  N    GLY  2538      40.960    3.901   55.670   1.00 18.13
ATOM   16992  CA   GLY  2538      40.633    3.882   57.078   1.00 19.82
ATOM   16993  C    GLY  2538      39.275    3.253   57.287   1.00 21.82
ATOM   16994  O    GLY  2538      39.013    2.131   56.843   1.00 22.22
ATOM   16995  N    LEU  2539      38.394    3.980   57.959   1.00 21.58
ATOM   16996  CA   LEU  2539      37.059    3.470   58.193   1.00 22.62
ATOM   16997  CB   LEU  2539      36.478    4.096   59.464   1.00 23.08
ATOM   16998  CG   LEU  2539      35.394    3.309   60.206   1.00 25.71
ATOM   16999  CD1  LEU  2539      34.896    4.150   61.377   1.00 27.15
ATOM   17000  CD2  LEU  2539      34.254    2.962   59.280   1.00 24.37
ATOM   17001  C    LEU  2539      36.213    3.830   56.977   1.00 22.01
ATOM   17002  O    LEU  2539      35.665    4.931   56.897   1.00 24.68
ATOM   17003  N    THR  2540      36.139    2.909   56.020   1.00 21.79
ATOM   17004  CA   THR  2540      35.350    3.100   54.801   1.00 23.60
ATOM   17005  CB   THR  2540      35.991    2.337   53.599   1.00 22.72
ATOM   17006  OG1  THR  2540      36.312    0.996   53.991   1.00 22.38
ATOM   17007  CG2  THR  2540      37.258    3.035   53.143   1.00 25.28
ATOM   17008  C    THR  2540      33.934    2.574   55.072   1.00 23.37
ATOM   17009  O    THR  2540      33.680    1.371   54.992   1.00 23.82
ATOM   17010  N    PRO  2541      32.997    3.483   55.403   1.00 24.67
ATOM   17011  CD   PRO  2541      33.189    4.941   55.330   1.00 25.29
ATOM   17012  CA   PRO  2541      31.595    3.165   55.711   1.00 23.91
ATOM   17013  CB   PRO  2541      30.927    4.543   55.801   1.00 25.13
ATOM   17014  CG   PRO  2541      31.817    5.420   54.989   1.00 29.14
ATOM   17015  C    PRO  2541      30.866    2.212   54.777   1.00 22.03
ATOM   17016  O    PRO  2541      29.964    1.489   55.212   1.00 21.27
ATOM   17017  N    GLN  2542      31.241    2.196   53.504   1.00 21.17
ATOM   17018  CA   GLN  2542      30.593    1.280   52.562   1.00 20.34
ATOM   17019  CB   GLN  2542      31.081    1.542   51.126   1.00 19.40
ATOM   17020  CG   GLN  2542      30.468    2.776   50.462   1.00 19.10
ATOM   17021  CD   GLN  2542      31.057    3.072   49.090   1.00 20.00
ATOM   17022  OE1  GLN  2542      31.534    2.172   48.399   1.00 21.78
ATOM   17023  NE2  GLN  2542      31.014    4.335   48.686   1.00 18.53
ATOM   17024  C    GLN  2542      30.887   -0.166   52.962   1.00 20.22
ATOM   17025  O    GLN  2542      30.106   -1.067   52.659   1.00 21.15
ATOM   17026  N    SER  2543      32.005   -0.381   53.655   1.00 21.08
ATOM   17027  CA   SER  2543      32.392   -1.725   54.089   1.00 20.09
ATOM   17028  CB   SER  2543      33.903   -1.934   53.925   1.00 22.29
ATOM   17029  OG   SER  2543      34.275   -2.037   52.553   1.00 22.70
ATOM   17030  C    SER  2543      32.009   -2.008   55.541   1.00 20.40
ATOM   17031  O    SER  2543      32.533   -2.938   56.162   1.00 19.84
ATOM   17032  N    VAL  2544      31.084   -1.218   56.077   1.00 19.14
ATOM   17033  CA   VAL  2544      30.644   -1.391   57.455   1.00 20.23
ATOM   17034  CB   VAL  2544      29.416   -0.473   57.774   1.00 21.04
ATOM   17035  CG1  VAL  2544      28.242   -0.812   56.867   1.00 22.60
ATOM   17036  CG2  VAL  2544      29.031   -0.615   59.235   1.00 24.52
ATOM   17037  C    VAL  2544      30.301   -2.847   57.775   1.00 19.12
ATOM   17038  O    VAL  2544      30.623   -3.343   58.854   1.00 17.37
ATOM   17039  N    ASN  2545      29.659   -3.533   56.835   1.00 20.26
ATOM   17040  CA   ASN  2545      29.288   -4.923   57.041   1.00 21.25
ATOM   17041  CB   ASN  2545      28.350   -5.383   55.921   1.00 20.97
ATOM   17042  CG   ASN  2545      27.009   -4.683   55.969   1.00 19.71
ATOM   17043  OD1  ASN  2545      26.215   -4.912   56.881   1.00 19.36
ATOM   17044  ND2  ASN  2545      26.755   -3.806   54.997   1.00 20.75
ATOM   17045  C    ASN  2545      30.521   -5.820   57.101   1.00 22.83
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ATOM   17046  O   ASN  2545     30.499  -6.877  57.726  1.00 23.72
ATOM   17047  N   ILE  2546     31.594  -5.395  56.443  1.00 22.99
ATOM   17048  CA  ILE  2546     32.839  -6.154  56.447  1.00 24.98
ATOM   17049  CB  ILE  2546     33.842  -5.623  55.379  1.00 25.25
ATOM   17050  CG2 ILE  2546     35.189  -6.332  55.529  1.00 24.01
ATOM   17051  CG1 ILE  2546     33.295  -5.852  53.968  1.00 25.29
ATOM   17052  CD1 ILE  2546     33.166  -7.330  53.587  1.00 25.88
ATOM   17053  C   ILE  2546     33.485  -6.028  57.827  1.00 26.31
ATOM   17054  O   ILE  2546     33.852  -7.027  58.445  1.00 25.76
ATOM   17055  N   PHE  2547     33.606  -4.794  58.309  1.00 26.71
ATOM   17056  CA  PHE  2547     34.214  -4.534  59.615  1.00 29.32
ATOM   17057  CB  PHE  2547     34.482  -3.033  59.802  1.00 29.87
ATOM   17058  CG  PHE  2547     35.258  -2.401  58.679  1.00 32.32
ATOM   17059  CD1 PHE  2547     36.474  -2.939  58.258  1.00 33.03
ATOM   17060  CD2 PHE  2547     34.782  -1.253  58.054  1.00 32.76
ATOM   17061  CE1 PHE  2547     37.204  -2.342  57.229  1.00 32.42
ATOM   17062  CE2 PHE  2547     35.504  -0.647  57.024  1.00 33.54
ATOM   17063  CZ  PHE  2547     36.719  -1.195  56.612  1.00 33.74
ATOM   17064  C   PHE  2547     33.325  -5.011  60.756  1.00 30.19
ATOM   17065  O   PHE  2547     33.814  -5.329  61.837  1.00 31.92
ATOM   17066  N   GLY  2548     32.020  -5.063  60.509  1.00 30.16
ATOM   17067  CA  GLY  2548     31.093  -5.483  61.541  1.00 30.32
ATOM   17068  C   GLY  2548     30.665  -4.284  62.367  1.00 31.76
ATOM   17069  O   GLY  2548     30.281  -4.412  63.529  1.00 33.19
ATOM   17070  N   GLY  2549     30.741  -3.106  61.756  1.00 32.09
ATOM   17071  CA  GLY  2549     30.361  -1.882  62.438  1.00 31.70
ATOM   17072  C   GLY  2549     31.326  -0.764  62.095  1.00 31.81
ATOM   17073  O   GLY  2549     32.223  -0.943  61.273  1.00 30.10
ATOM   17074  N   TYR  2550     31.151   0.394  62.722  1.00 32.22
ATOM   17075  CA  TYR  2550     32.030   1.525  62.467  1.00 33.59
ATOM   17076  CB  TYR  2550     31.229   2.827  62.456  1.00 34.84
ATOM   17077  CG  TYR  2550     30.084   2.806  61.470  1.00 36.99
ATOM   17078  CD1 TYR  2550     28.863   2.207  61.800  1.00 37.25
ATOM   17079  CE1 TYR  2550     27.821   2.140  60.875  1.00 38.43
ATOM   17080  CD2 TYR  2550     30.233   3.339  60.189  1.00 37.03
ATOM   17081  CE2 TYR  2550     29.201   3.275  59.255  1.00 37.75
ATOM   17082  CZ  TYR  2550     27.999   2.675  59.600  1.00 38.27
ATOM   17083  OH  TYR  2550     26.986   2.600  58.671  1.00 36.43
ATOM   17084  C   TYR  2550     33.105   1.564  63.546  1.00 34.34
ATOM   17085  O   TYR  2550     32.948   2.226  64.572  1.00 35.56
ATOM   17086  N   LYS  2551     34.194   0.840  63.306  1.00 32.76
ATOM   17087  CA  LYS  2551     35.298   0.752  64.254  1.00 32.19
ATOM   17088  CB  LYS  2551     35.598  -0.719  64.546  1.00 34.81
ATOM   17089  CG  LYS  2551     34.364  -1.541  64.900  1.00 38.01
ATOM   17090  CD  LYS  2551     34.699  -3.015  65.008  1.00 40.22
ATOM   17091  CE  LYS  2551     33.462  -3.851  65.283  1.00 41.88
ATOM   17092  NZ  LYS  2551     33.802  -5.302  65.396  1.00 44.79
ATOM   17093  C   LYS  2551     36.553   1.435  63.719  1.00 30.37
ATOM   17094  O   LYS  2551     36.786   1.462  62.513  1.00 30.25
ATOM   17095  N   VAL  2552     37.363   1.982  64.619  1.00 29.43
ATOM   17096  CA  VAL  2552     38.590   2.658  64.215  1.00 28.03
ATOM   17097  CB  VAL  2552     39.312   3.274  65.433  1.00 28.51
ATOM   17098  CG1 VAL  2552     40.619   3.922  65.001  1.00 26.74
ATOM   17099  CG2 VAL  2552     38.410   4.304  66.096  1.00 26.18
ATOM   17100  C   VAL  2552     39.512   1.662  63.518  1.00 27.85
ATOM   17101  O   VAL  2552     39.697   0.538  63.988  1.00 26.93
ATOM   17102  N   GLN  2553     40.085   2.080  62.395  1.00 27.87
ATOM   17103  CA  GLN  2553     40.973   1.217  61.626  1.00 29.57
ATOM   17104  CB  GLN  2553     40.523   1.196  60.162  1.00 30.19
ATOM   17105  CG  GLN  2553     40.399  -0.196  59.554  1.00 34.54
ATOM   17106  CD  GLN  2553     39.402  -1.069  60.292  1.00 34.33
ATOM   17107  OE1 GLN  2553     38.286  -0.641  60.594  1.00 35.02
ATOM   17108  NE2 GLN  2553     39.798  -2.303  60.582  1.00 37.14
ATOM   17109  C   GLN  2553     42.419   1.695  61.715  1.00 29.23
ATOM   17110  O   GLN  2553     42.686   2.813  62.152  1.00 29.38
ATOM   17111  N   GLY  2554     43.346   0.837  61.303  1.00 30.12
ATOM   17112  CA  GLY  2554     44.752   1.200  61.328  1.00 31.55
ATOM   17113  C   GLY  2554     45.499   0.751  62.568  1.00 33.25
ATOM   17114  O   GLY  2554     46.730   0.754  62.590  1.00 33.26
ATOM   17115  N   ARG  2555     44.755   0.371  63.602  1.00 33.75
ATOM   17116  CA  ARG  2555     45.350  -0.088  64.851  1.00 34.75
ATOM   17117  CB  ARG  2555     44.253  -0.548  65.818  1.00 36.93
ATOM   17118  CG  ARG  2555     43.309   0.558  66.303  1.00 39.18
ATOM   17119  CD  ARG  2555     43.894   1.309  67.489  1.00 40.08
ATOM   17120  NE  ARG  2555     42.993   2.331  68.030  1.00 39.43
ATOM   17121  CZ  ARG  2555     41.807   2.081  68.580  1.00 40.99
ATOM   17122  NH1 ARG  2555     41.356   0.836  68.666  1.00 41.89
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ATOM   17123  NH2 ARG  2555      41.075    3.079   69.058  1.00 38.37
ATOM   17124  C   ARG  2555      46.310   -1.242   64.581  1.00 34.23
ATOM   17125  O   ARG  2555      45.958   -2.208   63.903  1.00 33.15
ATOM   17126  N   GLY  2556      47.523   -1.140   65.114  1.00 34.60
ATOM   17127  CA  GLY  2556      48.503   -2.194   64.912  1.00 35.58
ATOM   17128  C   GLY  2556      49.469   -1.893   63.784  1.00 35.76
ATOM   17129  O   GLY  2556      49.157   -1.128   62.872  1.00 35.13
ATOM   17130  N   ASP  2557      50.647   -2.505   63.839  1.00 36.48
ATOM   17131  CA  ASP  2557      51.663   -2.282   62.819  1.00 36.98
ATOM   17132  CB  ASP  2557      52.984   -2.932   63.231  1.00 37.65
ATOM   17133  CG  ASP  2557      53.604   -2.265   64.437  1.00 38.08
ATOM   17134  OD1 ASP  2557      53.271   -1.088   64.697  1.00 38.16
ATOM   17135  OD2 ASP  2557      54.434   -2.909   65.115  1.00 38.66
ATOM   17136  C   ASP  2557      51.266   -2.776   61.439  1.00 36.71
ATOM   17137  O   ASP  2557      51.405   -2.049   60.457  1.00 38.15
ATOM   17138  N   GLU  2558      50.777   -4.009   61.358  1.00 36.83
ATOM   17139  CA  GLU  2558      50.381   -4.573   60.074  1.00 37.15
ATOM   17140  CB  GLU  2558      49.895   -6.012   60.242  1.00 40.41
ATOM   17141  CG  GLU  2558      49.768   -6.763   58.928  1.00 44.93
ATOM   17142  CD  GLU  2558      48.831   -7.946   59.018  1.00 47.28
ATOM   17143  OE1 GLU  2558      49.026   -8.794   59.916  1.00 48.79
ATOM   17144  OE2 GLU  2558      47.899   -8.027   58.187  1.00 48.79
ATOM   17145  C   GLU  2558      49.270   -3.740   59.450  1.00 36.06
ATOM   17146  O   GLU  2558      49.344   -3.363   58.280  1.00 34.74
ATOM   17147  N   ALA  2559      48.239   -3.456   60.240  1.00 33.89
ATOM   17148  CA  ALA  2559      47.114   -2.665   59.763  1.00 32.57
ATOM   17149  CB  ALA  2559      46.037   -2.571   60.846  1.00 32.43
ATOM   17150  C   ALA  2559      47.590   -1.274   59.366  1.00 30.42
ATOM   17151  O   ALA  2559      47.180   -0.739   58.338  1.00 30.62
ATOM   17152  N   GLY  2560      48.460   -0.694   60.188  1.00 28.46
ATOM   17153  CA  GLY  2560      48.978    0.630   59.898  1.00 26.73
ATOM   17154  C   GLY  2560      49.817    0.672   58.633  1.00 25.98
ATOM   17155  O   GLY  2560      49.664    1.574   57.811  1.00 25.52
ATOM   17156  N   ASP  2561      50.703   -0.305   58.465  1.00 25.18
ATOM   17157  CA  ASP  2561      51.558   -0.339   57.285  1.00 24.81
ATOM   17158  CB  ASP  2561      52.603   -1.451   57.401  1.00 26.12
ATOM   17159  CG  ASP  2561      53.606   -1.197   58.507  1.00 26.29
ATOM   17160  OD1 ASP  2561      53.951   -0.020   58.744  1.00 27.90
ATOM   17161  OD2 ASP  2561      54.064   -2.178   59.127  1.00 29.88
ATOM   17162  C   ASP  2561      50.731   -0.545   56.022  1.00 24.94
ATOM   17163  O   ASP  2561      51.032    0.020   54.967  1.00 25.26
ATOM   17164  N   GLN  2562      49.681   -1.351   56.127  1.00 25.61
ATOM   17165  CA  GLN  2562      48.829   -1.612   54.975  1.00 24.70
ATOM   17166  CB  GLN  2562      47.763   -2.651   55.324  1.00 27.82
ATOM   17167  CG  GLN  2562      46.939   -3.080   54.123  1.00 28.73
ATOM   17168  CD  GLN  2562      47.781   -3.794   53.087  1.00 29.94
ATOM   17169  OE1 GLN  2562      48.326   -4.865   53.356  1.00 31.90
ATOM   17170  NE2 GLN  2562      47.900   -3.204   51.898  1.00 29.29
ATOM   17171  C   GLN  2562      48.157   -0.327   54.504  1.00 24.50
ATOM   17172  O   GLN  2562      48.084   -0.059   53.303  1.00 23.09
ATOM   17173  N   LEU  2563      47.658    0.468   55.448  1.00 25.26
ATOM   17174  CA  LEU  2563      46.999    1.728   55.102  1.00 24.24
ATOM   17175  CB  LEU  2563      46.331    2.353   56.333  1.00 24.36
ATOM   17176  CG  LEU  2563      45.074    1.675   56.882  1.00 26.38
ATOM   17177  CD1 LEU  2563      44.544    2.465   58.070  1.00 27.10
ATOM   17178  CD2 LEU  2563      44.018    1.599   55.797  1.00 27.72
ATOM   17179  C   LEU  2563      48.006    2.707   54.528  1.00 24.78
ATOM   17180  O   LEU  2563      47.694    3.476   53.619  1.00 22.15
ATOM   17181  N   LEU  2564      49.220    2.682   55.067  1.00 24.45
ATOM   17182  CA  LEU  2564      50.264    3.580   54.590  1.00 23.89
ATOM   17183  CB  LEU  2564      51.495    3.480   55.491  1.00 25.26
ATOM   17184  CG  LEU  2564      52.282    4.773   55.744  1.00 27.78
ATOM   17185  CD1 LEU  2564      53.598    4.405   56.410  1.00 29.55
ATOM   17186  CD2 LEU  2564      52.535    5.535   54.457  1.00 27.60
ATOM   17187  C   LEU  2564      50.638    3.173   53.169  1.00 21.75
ATOM   17188  O   LEU  2564      50.738    4.013   52.277  1.00 22.25
ATOM   17189  N   SER  2565      50.838    1.875   52.968  1.00 21.52
ATOM   17190  CA  SER  2565      51.205    1.361   51.658  1.00 23.48
ATOM   17191  CB  SER  2565      51.473   -0.142   51.745  1.00 26.47
ATOM   17192  OG  SER  2565      51.998   -0.634   50.523  1.00 34.86
ATOM   17193  C   SER  2565      50.107    1.645   50.632  1.00 22.74
ATOM   17194  O   SER  2565      50.390    1.989   49.481  1.00 21.74
ATOM   17195  N   ASP  2566      48.853    1.500   51.054  1.00 19.93
ATOM   17196  CA  ASP  2566      47.718    1.753   50.168  1.00 18.63
ATOM   17197  CB  ASP  2566      46.399    1.335   50.836  1.00 19.80
ATOM   17198  CG  ASP  2566      46.206   -0.174   50.867  1.00 21.76
ATOM   17199  OD1 ASP  2566      46.935   -0.883   50.146  1.00 24.30
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ATOM   17200  OD2 ASP  2566      45.313  -0.655  51.605  1.00 20.99
ATOM   17201  C   ASP  2566      47.647   3.226  49.785  1.00 18.77
ATOM   17202  O   ASP  2566      47.329   3.560  48.650  1.00 19.96
ATOM   17203  N   ALA  2567      47.945   4.109  50.732  1.00 17.84
ATOM   17204  CA  ALA  2567      47.904   5.536  50.451  1.00 17.61
ATOM   17205  CB  ALA  2567      48.135   6.341  51.731  1.00 18.06
ATOM   17206  C   ALA  2567      48.964   5.894  49.412  1.00 16.53
ATOM   17207  O   ALA  2567      48.705   6.675  48.504  1.00 15.81
ATOM   17208  N   LEU  2568      50.162   5.338  49.560  1.00 16.61
ATOM   17209  CA  LEU  2568      51.232   5.615  48.613  1.00 18.69
ATOM   17210  CB  LEU  2568      52.563   5.047  49.127  1.00 21.36
ATOM   17211  CG  LEU  2568      53.121   5.741  50.379  1.00 22.49
ATOM   17212  CD1 LEU  2568      54.332   4.997  50.913  1.00 25.07
ATOM   17213  CD2 LEU  2568      53.484   7.182  50.031  1.00 24.13
ATOM   17214  C   LEU  2568      50.887   5.011  47.249  1.00 18.91
ATOM   17215  O   LEU  2568      51.158   5.611  46.214  1.00 20.34
ATOM   17216  N   ALA  2569      50.268   3.835  47.254  1.00 19.41
ATOM   17217  CA  ALA  2569      49.892   3.155  46.015  1.00 20.41
ATOM   17218  CB  ALA  2569      49.395   1.738  46.317  1.00 19.39
ATOM   17219  C   ALA  2569      48.820   3.929  45.257  1.00 20.57
ATOM   17220  O   ALA  2569      48.834   3.982  44.024  1.00 18.66
ATOM   17221  N   LEU  2570      47.875   4.506  45.996  1.00 21.33
ATOM   17222  CA  LEU  2570      46.810   5.295  45.385  1.00 20.35
ATOM   17223  CB  LEU  2570      45.718   5.630  46.412  1.00 20.88
ATOM   17224  CG  LEU  2570      44.822   4.476  46.878  1.00 20.36
ATOM   17225  CD1 LEU  2570      43.854   4.960  47.959  1.00 20.64
ATOM   17226  CD2 LEU  2570      44.056   3.926  45.682  1.00 21.94
ATOM   17227  C   LEU  2570      47.401   6.582  44.824  1.00 20.57
ATOM   17228  O   LEU  2570      46.999   7.049  43.754  1.00 16.60
ATOM   17229  N   GLU  2571      48.356   7.163  45.547  1.00 19.59
ATOM   17230  CA  GLU  2571      48.990   8.389  45.076  1.00 20.08
ATOM   17231  CB  GLU  2571      49.965   8.937  46.127  1.00 19.80
ATOM   17232  CG  GLU  2571      50.705  10.184  45.662  1.00 22.18
ATOM   17233  CD  GLU  2571      51.688  10.684  46.706  1.00 22.20
ATOM   17234  OE1 GLU  2571      52.470   9.854  47.213  1.00 23.24
ATOM   17235  OE2 GLU  2571      51.677  11.891  47.003  1.00 21.21
ATOM   17236  C   GLU  2571      49.748   8.124  43.779  1.00 19.41
ATOM   17237  O  ·GLU  2571      49.658   8.904  42.833  1.00 20.18
ATOM   17238  N   ALA  2572      50.491   7.020  43.745  1.00 20.49
ATOM   17239  CA  ALA  2572      51.266   6.660  42.564  1.00 21.39
ATOM   17240  CB  ALA  2572      52.137   5.453  42.859  1.00 23.82
ATOM   17241  C   ALA  2572      50.347   6.363  41.388  1.00 22.09
ATOM   17242  O   ALA  2572      50.718   6.555  40.228  1.00 20.31
ATOM   17243  N   ALA  2573      49.142   5.903  41.702  1.00 22.04
ATOM   17244  CA  ALA  2573      48.152   5.564  40.689  1.00 21.67
ATOM   17245  CB  ALA  2573      47.038   4.725  41.313  1.00 20.41
ATOM   17246  C   ALA  2573      47.569   6.807  40.029  1.00 20.80
ATOM   17247  O   ALA  2573      47.084   6.746  38.900  1.00 20.43
ATOM   17248  N   GLY  2574      47.615   7.934  40.733  1.00 19.07
ATOM   17249  CA  GLY  2574      47.089   9.163  40.168  1.00 17.50
ATOM   17250  C   GLY  2574      46.141   9.944  41.060  1.00 17.16
ATOM   17251  O   GLY  2574      45.716  11.041  40.701  1.00 17.95
ATOM   17252  N   ALA  2575      45.796   9.390  42.217  1.00 17.09
ATOM   17253  CA  ALA  2575      44.904  10.083  43.137  1.00 19.39
ATOM   17254  CB  ALA  2575      44.694   9.246  44.388  1.00 17.57
ATOM   17255  C   ALA  2575      45.516  11.444  43.498  1.00 20.74
ATOM   17256  O   ALA  2575      46.687  11.526  43.876  1.00 22.35
ATOM   17257  N   GLN  2576      44.731  12.510  43.375  1.00 20.06
ATOM   17258  CA  GLN  2576      45.226  13.848  43.684  1.00 21.20
ATOM   17259  CB  GLN  2576      44.733  14.836  42.628  1.00 24.45
ATOM   17260  CG  GLN  2576      45.226  14.509  41.223  1.00 29.02
ATOM   17261  CD  GLN  2576      44.551  15.337  40.149  1.00 31.24
ATOM   17262  OE1 GLN  2576      44.686  16.559  40.109  1.00 36.20
ATOM   17263  NE2 GLN  2576      43.811  14.671  39.271  1.00 32.65
ATOM   17264  C   GLN  2576      44.822  14.316  45.082  1.00 21.51
ATOM   17265  O   GLN  2576      45.260  15.371  45.549  1.00 19.45
ATOM   17266  N   LEU  2577      43.991  13.519  45.744  1.00 20.67
ATOM   17267  CA  LEU  2577      43.517  13.817  47.093  1.00 21.57
ATOM   17268  CB  LEU  2577      42.207  14.609  47.032  1.00 25.05
ATOM   17269  CG  LEU  2577      42.283  16.133  47.063  1.00 26.27
ATOM   17270  CD1 LEU  2577      40.924  16.728  46.738  1.00 27.14
ATOM   17271  CD2 LEU  2577      42.751  16.576  48.449  1.00 27.72
ATOM   17272  C   LEU  2577      43.280  12.515  47.850  1.00 21.36
ATOM   17273  O   LEU  2577      43.059  11.472  47.239  1.00 22.18
ATOM   17274  N   LEU  2578      43.327  12.571  49.178  1.00 19.22
ATOM   17275  CA  LEU  2578      43.085  11.383  49.991  1.00 19.03
ATOM   17276  CB  LEU  2578      44.403  10.691  50.389  1.00 19.80
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ATOM	17277	CG	LEU	2578	44.235	9.475	51.320	1.00	20.24
ATOM	17278	CD1	LEU	2578	43.537	8.346	50.556	1.00	21.15
ATOM	17279	CD2	LEU	2578	45.587	8.989	51.840	1.00	20.62
ATOM	17280	C	LEU	2578	42.321	11.722	51.261	1.00	20.13
ATOM	17281	O	LEU	2578	42.636	12.694	51.949	1.00	20.75
ATOM	17282	N	VAL	2579	41.303	10.924	51.560	1.00	19.83
ATOM	17283	CA	VAL	2579	40.529	11.105	52.779	1.00	18.16
ATOM	17284	CB	VAL	2579	39.000	11.083	52.508	1.00	17.51
ATOM	17285	CG1	VAL	2579	38.230	10.860	53.822	1.00	16.02
ATOM	17286	CG2	VAL	2579	38.569	12.401	51.890	1.00	17.32
ATOM	17287	C	VAL	2579	40.884	9.962	53.720	1.00	19.66
ATOM	17288	O	VAL	2579	40.874	8.793	53.321	1.00	19.81
ATOM	17289	N	LEU	2580	41.232	10.316	54.956	1.00	19.69
ATOM	17290	CA	LEU	2580	41.576	9.350	55.997	1.00	20.23
ATOM	17291	CB	LEU	2580	42.912	9.684	56.656	1.00	21.71
ATOM	17292	CG	LEU	2580	44.174	9.119	56.045	1.00	24.93
ATOM	17293	CD1	LEU	2580	45.332	9.429	56.983	1.00	22.17
ATOM	17294	CD2	LEU	2580	44.027	7.607	55.848	1.00	22.55
ATOM	17295	C	LEU	2580	40.510	9.440	57.063	1.00	19.52
ATOM	17296	O	LEU	2580	40.321	10.502	57.648	1.00	20.28
ATOM	17297	N	GLU	2581	39.840	8.327	57.330	1.00	19.37
ATOM	17298	CA	GLU	2581	38.759	8.310	58.308	1.00	19.88
ATOM	17299	CB	GLU	2581	37.452	7.906	57.611	1.00	20.26
ATOM	17300	CG	GLU	2581	36.289	7.660	58.564	1.00	22.54
ATOM	17301	CD	GLU	2581	34.945	7.737	57.869	1.00	24.53
ATOM	17302	OE1	GLU	2581	34.920	7.787	56.622	1.00	21.82
ATOM	17303	OE2	GLU	2581	33.912	7.748	58.572	1.00	26.36
ATOM	17304	C	GLU	2581	38.974	7.416	59.519	1.00	17.68
ATOM	17305	O	GLU	2581	39.317	6.247	59.388	1.00	18.36
ATOM	17306	N	CYS	2582	38.779	7.988	60.701	1.00	19.70
ATOM	17307	CA	CYS	2582	38.896	7.263	61.955	1.00	19.88
ATOM	17308	CB	CYS	2582	37.605	6.489	62.218	1.00	21.29
ATOM	17309	SG	CYS	2582	36.197	7.601	62.460	1.00	24.19
ATOM	17310	C	CYS	2582	40.091	6.340	62.067	1.00	19.95
ATOM	17311	O	CYS	2582	39.963	5.118	62.120	1.00	21.49
ATOM	17312	N	VAL	2583	41.261	6.954	62.127	1.00	21.05
ATOM	17313	CA	VAL	2583	42.506	6.226	62.241	1.00	23.03
ATOM	17314	CB	VAL	2583	43.317	6.351	60.924	1.00	23.48
ATOM	17315	CG1	VAL	2583	43.590	7.812	60.617	1.00	23.25
ATOM	17316	CG2	VAL	2583	44.609	5.593	61.029	1.00	25.06
ATOM	17317	C	VAL	2583	43.277	6.871	63.385	1.00	23.22
ATOM	17318	O	VAL	2583	43.094	8.053	63.675	1.00	22.61
ATOM	17319	N	PRO	2584	44.132	6.099	64.067	1.00	24.47
ATOM	17320	CD	PRO	2584	44.412	4.662	63.956	1.00	23.45
ATOM	17321	CA	PRO	2584	44.891	6.701	65.163	1.00	24.14
ATOM	17322	CB	PRO	2584	45.745	5.538	65.680	1.00	25.70
ATOM	17323	CG	PRO	2584	45.792	4.581	64.518	1.00	28.17
ATOM	17324	C	PRO	2584	45.708	7.873	64.635	1.00	24.60
ATOM	17325	O	PRO	2584	46.285	7.804	63.545	1.00	23.19
ATOM	17326	N	VAL	2585	45.727	8.958	65.400	1.00	23.51
ATOM	17327	CA	VAL	2585	46.444	10.172	65.025	1.00	23.75
ATOM	17328	CB	VAL	2585	46.511	11.158	66.214	1.00	24.99
ATOM	17329	CG1	VAL	2585	47.098	12.491	65.758	1.00	23.50
ATOM	17330	CG2	VAL	2585	45.124	11.363	66.790	1.00	25.53
ATOM	17331	C	VAL	2585	47.865	9.895	64.549	1.00	25.46
ATOM	17332	O	VAL	2585	48.317	10.477	63.563	1.00	24.79
ATOM	17333	N	GLU	2586	48.563	9.002	65.245	1.00	26.45
ATOM	17334	CA	GLU	2586	49.939	8.683	64.879	1.00	28.54
ATOM	17335	CB	GLU	2586	50.559	7.688	65.873	1.00	30.14
ATOM	17336	CG	GLU	2586	49.580	6.852	66.695	1.00	35.51
ATOM	17337	CD	GLU	2586	48.843	7.665	67.757	1.00	37.22
ATOM	17338	OE1	GLU	2586	49.464	8.566	68.363	1.00	38.20
ATOM	17339	OE2	GLU	2586	47.649	7.388	67.992	1.00	39.25
ATOM	17340	C	GLU	2586	50.064	8.150	63.456	1.00	28.46
ATOM	17341	O	GLU	2586	51.045	8.425	62.769	1.00	27.67
ATOM	17342	N	LEU	2587	49.065	7.394	63.017	1.00	27.65
ATOM	17343	CA	LEU	2587	49.077	6.834	61.674	1.00	26.73
ATOM	17344	CB	LEU	2587	48.026	5.731	61.554	1.00	28.21
ATOM	17345	CG	LEU	2587	48.378	4.497	60.721	1.00	30.72
ATOM	17346	CD1	LEU	2587	47.099	3.720	60.454	1.00	29.14
ATOM	17347	CD2	LEU	2587	49.043	4.886	59.409	1.00	30.86
ATOM	17348	C	LEU	2587	48.785	7.937	60.654	1.00	26.34
ATOM	17349	O	LEU	2587	49.398	7.987	59.583	1.00	24.48
ATOM	17350	N	ALA	2588	47.848	8.820	60.994	1.00	24.00
ATOM	17351	CA	ALA	2588	47.484	9.922	60.111	1.00	23.70
ATOM	17352	CB	ALA	2588	46.331	10.737	60.712	1.00	23.08
ATOM	17353	C	ALA	2588	48.691	10.815	59.887	1.00	24.14

ATOM	17354	O	ALA	2588	48.839	11.415	58.822	1.00	22.54
ATOM	17355	N	LYS	2589	49.548	10.904	60.901	1.00	24.22
ATOM	17356	CA	LYS	2589	50.760	11.709	60.816	1.00	25.74
ATOM	17357	CB	LYS	2589	51.471	11.751	62.172	1.00	27.20
ATOM	17358	CG	LYS	2589	50.586	12.130	63.345	1.00	32.13
ATOM	17359	CD	LYS	2589	51.399	12.323	64.625	1.00	36.29
ATOM	17360	CE	LYS	2589	50.510	12.760	65.784	1.00	35.55
ATOM	17361	NZ	LYS	2589	51.296	13.309	66.917	1.00	39.50
ATOM	17362	C	LYS	2589	51.694	11.086	59.781	1.00	23.37
ATOM	17363	O	LYS	2589	52.171	11.768	58.881	1.00	26.48
ATOM	17364	N	ARG	2590	51.934	9.785	59.915	1.00	23.58
ATOM	17365	CA	ARG	2590	52.813	9.062	59.005	1.00	22.93
ATOM	17366	CB	ARG	2590	52.882	7.575	59.374	1.00	25.56
ATOM	17367	CG	ARG	2590	52.959	7.280	60.863	1.00	27.56
ATOM	17368	CD	ARG	2590	53.951	6.177	61.187	1.00	28.90
ATOM	17369	NE	ARG	2590	53.876	4.999	60.319	1.00	28.63
ATOM	17370	CZ	ARG	2590	53.110	3.933	60.536	1.00	30.48
ATOM	17371	NH1	ARG	2590	52.322	3.872	61.601	1.00	30.99
ATOM	17372	NH2	ARG	2590	53.159	2.903	59.701	1.00	30.22
ATOM	17373	C	ARG	2590	52.346	9.183	57.556	1.00	22.50
ATOM	17374	O	ARG	2590	53.152	9.366	56.641	1.00	21.17
ATOM	17375	N	ILE	2591	51.040	9.073	57.342	1.00	20.92
ATOM	17376	CA	ILE	2591	50.493	9.150	55.993	1.00	19.61
ATOM	17377	CB	ILE	2591	49.023	8.673	55.980	1.00	20.34
ATOM	17378	CG2	ILE	2591	48.418	8.871	54.600	1.00	21.46
ATOM	17379	CG1	ILE	2591	48.971	7.206	56.395	1.00	20.56
ATOM	17380	CD1	ILE	2591	47.585	6.658	56.588	1.00	25.52
ATOM	17381	C	ILE	2591	50.591	10.552	55.410	1.00	20.03
ATOM	17382	O	ILE	2591	51.005	10.732	54.261	1.00	19.07
ATOM	17383	N	THR	2592	50.225	11.549	56.207	1.00	20.25
ATOM	17384	CA	THR	2592	50.276	12.928	55.749	1.00	22.08
ATOM	17385	CB	THR	2592	49.743	13.894	56.826	1.00	21.69
ATOM	17386	OG1	THR	2592	48.358	13.615	57.070	1.00	22.71
ATOM	17387	CG2	THR	2592	49.889	15.343	56.368	1.00	22.53
ATOM	17388	C	THR	2592	51.693	13.346	55.376	1.00	23.76
ATOM	17389	O	THR	2592	51.896	14.092	54.417	1.00	24.12
ATOM	17390	N	GLU	2593	52.676	12.871	56.129	1.00	25.91
ATOM	17391	CA	GLU	2593	54.059	13.227	55.834	1.00	27.67
ATOM	17392	CB	GLU	2593	54.936	13.023	57.071	1.00	29.33
ATOM	17393	CG	GLU	2593	54.427	13.761	58.299	1.00	33.19
ATOM	17394	CD	GLU	2593	55.367	13.650	59.486	1.00	36.93
ATOM	17395	OE1	GLU	2593	55.815	12.520	59.792	1.00	38.76
ATOM	17396	OE2	GLU	2593	55.649	14.689	60.121	1.00	38.10
ATOM	17397	C	GLU	2593	54.600	12.407	54.664	1.00	26.14
ATOM	17398	O	GLU	2593	55.381	12.911	53.855	1.00	26.29
ATOM	17399	N	ALA	2594	54.172	11.153	54.565	1.00	24.55
ATOM	17400	CA	ALA	2594	54.626	10.281	53.489	1.00	24.61
ATOM	17401	CB	ALA	2594	54.252	8.833	53.801	1.00	24.77
ATOM	17402	C	ALA	2594	54.088	10.679	52.115	1.00	24.72
ATOM	17403	O	ALA	2594	54.781	10.519	51.106	1.00	24.92
ATOM	17404	N	LEU	2595	52.862	11.198	52.069	1.00	23.86
ATOM	17405	CA	LEU	2595	52.259	11.602	50.796	1.00	23.39
ATOM	17406	CB	LEU	2595	50.739	11.377	50.818	1.00	23.16
ATOM	17407	CG	LEU	2595	50.211	9.935	50.851	1.00	25.00
ATOM	17408	CD1	LEU	2595	48.681	9.954	50.756	1.00	24.60
ATOM	17409	CD2	LEU	2595	50.781	9.145	49.698	1.00	27.49
ATOM	17410	C	LEU	2595	52.526	13.050	50.410	1.00	22.38
ATOM	17411	O	LEU	2595	52.590	13.934	51.260	1.00	22.82
ATOM	17412	N	ALA	2596	52.673	13.280	49.112	1.00	21.91
ATOM	17413	CA	ALA	2596	52.907	14.618	48.580	1.00	20.98
ATOM	17414	CB	ALA	2596	53.676	14.532	47.259	1.00	21.84
ATOM	17415	C	ALA	2596	51.551	15.284	48.358	1.00	21.83
ATOM	17416	O	ALA	2596	51.402	16.500	48.522	1.00	19.07
ATOM	17417	N	ILE	2597	50.563	14.477	47.972	1.00	22.36
ATOM	17418	CA	ILE	2597	49.206	14.975	47.744	1.00	22.38
ATOM	17419	CB	ILE	2597	48.329	13.917	47.038	1.00	20.84
ATOM	17420	CG2	ILE	2597	48.874	13.629	45.652	1.00	21.38
ATOM	17421	CG1	ILE	2597	48.274	12.642	47.887	1.00	20.61
ATOM	17422	CD1	ILE	2597	47.252	11.612	47.410	1.00	22.88
ATOM	17423	C	ILE	2597	48.556	15.315	49.084	1.00	23.26
ATOM	17424	O	ILE	2597	48.889	14.724	50.109	1.00	24.06
ATOM	17425	N	PRO	2598	47.618	16.276	49.091	1.00	24.26
ATOM	17426	CD	PRO	2598	47.190	17.134	47.973	1.00	24.78
ATOM	17427	CA	PRO	2598	46.951	16.657	50.339	1.00	24.43
ATOM	17428	CB	PRO	2598	46.158	17.908	49.946	1.00	24.29
ATOM	17429	CG	PRO	2598	45.908	17.716	48.487	1.00	27.18
ATOM	17430	C	PRO	2598	46.079	15.553	50.935	1.00	23.63

ATOM	17431	O	PRO	2598	45.401	14.813	50.218	1.00	23.16
ATOM	17432	N	VAL	2599	46.126	15.440	52.257	1.00	22.78
ATOM	17433	CA	VAL	2599	45.360	14.441	52.984	1.00	22.33
ATOM	17434	CB	VAL	2599	46.286	13.580	53.873	1.00	22.48
ATOM	17435	CG1	VAL	2599	45.475	12.535	54.623	1.00	22.67
ATOM	17436	CG2	VAL	2599	47.350	12.915	53.013	1.00	22.46
ATOM	17437	C	VAL	2599	44.311	15.133	53.857	1.00	23.71
ATOM	17438	O	VAL	2599	44.638	15.979	54.692	1.00	22.13
ATOM	17439	N	ILE	2600	43.048	14.779	53.642	1.00	21.85
ATOM	17440	CA	ILE	2600	41.944	15.360	54.397	1.00	20.33
ATOM	17441	CB	ILE	2600	40.774	15.719	53.459	1.00	19.87
ATOM	17442	CG2	ILE	2600	39.599	16.283	54.269	1.00	20.69
ATOM	17443	CG1	ILE	2600	41.265	16.720	52.409	1.00	22.41
ATOM	17444	CD1	ILE	2600	40.294	16.981	51.262	1.00	23.07
ATOM	17445	C	ILE	2600	41.492	14.343	55.429	1.00	19.49
ATOM	17446	O	ILE	2600	41.199	13.199	55.094	1.00	18.22
ATOM	17447	N	GLY	2601	41.442	14.754	56.690	1.00	19.36
ATOM	17448	CA	GLY	2601	41.053	13.813	57.715	1.00	18.13
ATOM	17449	C	GLY	2601	39.700	14.052	58.342	1.00	18.77
ATOM	17450	O	GLY	2601	39.154	15.155	58.303	1.00	18.02
ATOM	17451	N	ILE	2602	39.155	12.976	58.892	1.00	18.53
ATOM	17452	CA	ILE	2602	37.892	12.998	59.600	1.00	19.83
ATOM	17453	CB	ILE	2602	36.684	12.679	58.671	1.00	21.77
ATOM	17454	CG2	ILE	2602	36.964	11.449	57.822	1.00	21.95
ATOM	17455	CG1	ILE	2602	35.424	12.479	59.518	1.00	24.57
ATOM	17456	CD1	ILE	2602	35.090	13.650	60.403	1.00	27.84
ATOM	17457	C	ILE	2602	38.059	11.919	60.658	1.00	19.03
ATOM	17458	O	ILE	2602	38.075	10.724	60.354	1.00	20.33
ATOM	17459	N	GLY	2603	38.217	12.352	61.901	1.00	16.91
ATOM	17460	CA	GLY	2603	38.431	11.411	62.980	1.00	18.24
ATOM	17461	C	GLY	2603	39.864	10.914	62.930	1.00	18.71
ATOM	17462	O	GLY	2603	40.169	9.825	63.410	1.00	19.69
ATOM	17463	N	ALA	2604	40.743	11.717	62.335	1.00	20.83
ATOM	17464	CA	ALA	2604	42.160	11.363	62.210	1.00	22.46
ATOM	17465	CB	ALA	2604	42.534	11.229	60.735	1.00	21.76
ATOM	17466	C	ALA	2604	43.076	12.382	62.885	1.00	23.51
ATOM	17467	O	ALA	2604	44.292	12.370	62.671	1.00	23.26
ATOM	17468	N	GLY	2605	42.492	13.268	63.689	1.00	22.78
ATOM	17469	CA	GLY	2605	43.285	14.273	64.381	1.00	24.37
ATOM	17470	C	GLY	2605	43.540	15.523	63.560	1.00	23.63
ATOM	17471	O	GLY	2605	43.042	15.650	62.444	1.00	23.74
ATOM	17472	N	ASN	2606	44.322	16.453	64.102	1.00	22.37
ATOM	17473	CA	ASN	2606	44.610	17.696	63.391	1.00	22.84
ATOM	17474	CB	ASN	2606	44.614	18.884	64.368	1.00	24.03
ATOM	17475	CG	ASN	2606	45.751	18.816	65.384	1.00	27.25
ATOM	17476	OD1	ASN	2606	45.935	19.737	66.182	1.00	30.24
ATOM	17477	ND2	ASN	2606	46.513	17.729	65.360	1.00	21.63
ATOM	17478	C	ASN	2606	45.935	17.649	62.644	1.00	22.00
ATOM	17479	O	ASN	2606	46.428	18.680	62.185	1.00	22.27
ATOM	17480	N	VAL	2607	46.491	16.450	62.501	1.00	21.97
ATOM	17481	CA	VAL	2607	47.782	16.264	61.835	1.00	23.06
ATOM	17482	CB	VAL	2607	48.473	14.975	62.343	1.00	25.16
ATOM	17483	CG1	VAL	2607	49.896	14.903	61.813	1.00	30.68
ATOM	17484	CG2	VAL	2607	48.478	14.951	63.863	1.00	28.00
ATOM	17485	C	VAL	2607	47.698	16.210	60.308	1.00	22.15
ATOM	17486	O	VAL	2607	48.708	16.350	59.614	1.00	19.36
ATOM	17487	N	THR	2608	46.489	16.010	59.791	1.00	20.18
ATOM	17488	CA	THR	2608	46.273	15.945	58.354	1.00	18.55
ATOM	17489	CB	THR	2608	44.931	15.247	58.040	1.00	17.48
ATOM	17490	OG1	THR	2608	43.864	15.942	58.698	1.00	17.94
ATOM	17491	CG2	THR	2608	44.958	13.815	58.538	1.00	16.25
ATOM	17492	C	THR	2608	46.288	17.340	57.736	1.00	18.46
ATOM	17493	O	THR	2608	46.208	18.344	58.444	1.00	18.52
ATOM	17494	N	ASP	2609	46.392	17.392	56.414	1.00	18.90
ATOM	17495	CA	ASP	2609	46.438	18.653	55.685	1.00	19.61
ATOM	17496	CB	ASP	2609	46.858	18.384	54.238	1.00	20.80
ATOM	17497	CG	ASP	2609	48.209	17.698	54.143	1.00	22.85
ATOM	17498	OD1	ASP	2609	49.214	18.315	54.550	1.00	25.80
ATOM	17499	OD2	ASP	2609	48.269	16.544	53.662	1.00	25.46
ATOM	17500	C	ASP	2609	45.101	19.380	55.711	1.00	19.79
ATOM	17501	O	ASP	2609	45.051	20.607	55.693	1.00	18.76
ATOM	17502	N	GLY	2610	44.014	18.620	55.754	1.00	19.79
ATOM	17503	CA	GLY	2610	42.703	19.239	55.771	1.00	17.70
ATOM	17504	C	GLY	2610	41.726	18.492	56.646	1.00	14.64
ATOM	17505	O	GLY	2610	42.051	17.457	57.224	1.00	17.46
ATOM	17506	N	GLN	2611	40.516	19.024	56.752	1.00	17.50
ATOM	17507	CA	GLN	2611	39.482	18.398	57.559	1.00	17.89

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ATOM   17508  CB   GLN  2611     39.268  19.190  58.853  1.00 19.92
ATOM   17509  CG   GLN  2611     40.465  19.210  59.799  1.00 20.42
ATOM   17510  CD   GLN  2611     40.848  17.829  60.291  1.00 22.00
ATOM   17511  OE1  GLN  2611     39.984  17.015  60.627  1.00 24.29
ATOM   17512  NE2  GLN  2611     42.148  17.561  60.354  1.00 19.83
ATOM   17513  C    GLN  2611     38.164  18.341  56.800  1.00 17.01
ATOM   17514  O    GLN  2611     37.911  19.151  55.905  1.00 17.06
ATOM   17515  N    ILE  2612     37.327  17.379  57.168  1.00 20.01
ATOM   17516  CA   ILE  2612     36.013  17.239  56.557  1.00 21.18
ATOM   17517  CB   ILE  2612     36.047  16.279  55.336  1.00 21.95
ATOM   17518  CG2  ILE  2612     36.253  14.835  55.791  1.00 17.51
ATOM   17519  CG1  ILE  2612     34.743  16.421  54.542  1.00 21.60
ATOM   17520  CD1  ILE  2612     34.855  15.977  53.097  1.00 22.16
ATOM   17521  C    ILE  2612     35.043  16.724  57.611  1.00 23.20
ATOM   17522  O    ILE  2612     35.435  16.034  58.559  1.00 23.34
ATOM   17523  N    LEU  2613     33.774  17.072  57.458  1.00 25.17
ATOM   17524  CA   LEU  2613     32.774  16.644  58.416  1.00 27.65
ATOM   17525  CB   LEU  2613     32.932  17.476  59.686  1.00 31.09
ATOM   17526  CG   LEU  2613     32.465  16.923  61.030  1.00 34.00
ATOM   17527  CD1  LEU  2613     32.834  17.930  62.111  1.00 34.54
ATOM   17528  CD2  LEU  2613     30.962  16.673  61.020  1.00 35.29
ATOM   17529  C    LEU  2613     31.382  16.842  57.821  1.00 27.54
ATOM   17530  O    LEU  2613     31.168  17.767  57.044  1.00 26.77
ATOM   17531  N    VAL  2614     30.450  15.961  58.173  1.00 27.38
ATOM   17532  CA   VAL  2614     29.087  16.073  57.678  1.00 27.05
ATOM   17533  CB   VAL  2614     28.210  14.890  58.141  1.00 28.19
ATOM   17534  CG1  VAL  2614     26.793  15.037  57.597  1.00 28.81
ATOM   17535  CG2  VAL  2614     28.825  13.577  57.671  1.00 28.09
ATOM   17536  C    VAL  2614     28.523  17.375  58.238  1.00 25.84
ATOM   17537  O    VAL  2614     28.502  17.590  59.449  1.00 26.11
ATOM   17538  N    MET  2615     28.085  18.251  57.344  1.00 24.55
ATOM   17539  CA   MET  2615     27.541  19.532  57.753  1.00 22.58
ATOM   17540  CB   MET  2615     26.987  20.274  56.546  1.00 20.69
ATOM   17541  CG   MET  2615     25.813  19.564  55.890  1.00 18.65
ATOM   17542  SD   MET  2615     24.658  20.775  55.265  1.00 19.02
ATOM   17543  CE   MET  2615     23.584  20.962  56.690  1.00 18.27
ATOM   17544  C    MET  2615     26.440  19.393  58.806  1.00 22.84
ATOM   17545  O    MET  2615     26.255  20.281  59.632  1.00 22.93
ATOM   17546  N    HIS  2616     25.701  18.288  58.776  1.00 21.47
ATOM   17547  CA   HIS  2616     24.627  18.100  59.737  1.00 21.54
ATOM   17548  CB   HIS  2616     23.741  16.930  59.314  1.00 21.41
ATOM   17549  CG   HIS  2616     23.013  17.181  58.030  1.00 18.70
ATOM   17550  CD2  HIS  2616     23.417  17.071  56.743  1.00 16.47
ATOM   17551  ND1  HIS  2616     21.736  17.697  57.987  1.00 20.75
ATOM   17552  CE1  HIS  2616     21.385  17.895  56.729  1.00 18.61
ATOM   17553  NE2  HIS  2616     22.388  17.524  55.955  1.00 20.61
ATOM   17554  C    HIS  2616     25.122  17.916  61.161  1.00 23.40
ATOM   17555  O    HIS  2616     24.420  18.266  62.113  1.00 21.84
ATOM   17556  N    ASP  2617     26.328  17.379  61.322  1.00 24.60
ATOM   17557  CA   ASP  2617     26.880  17.188  62.664  1.00 28.05
ATOM   17558  CB   ASP  2617     27.918  16.060  62.677  1.00 29.84
ATOM   17559  CG   ASP  2617     27.311  14.703  62.396  1.00 32.71
ATOM   17560  OD1  ASP  2617     26.339  14.322  63.088  1.00 30.70
ATOM   17561  OD2  ASP  2617     27.818  14.012  61.487  1.00 34.71
ATOM   17562  C    ASP  2617     27.535  18.473  63.153  1.00 28.63
ATOM   17563  O    ASP  2617     27.681  18.679  64.356  1.00 30.14
ATOM   17564  N    ALA  2618     27.928  19.333  62.217  1.00 29.76
ATOM   17565  CA   ALA  2618     28.577  20.593  62.561  1.00 31.50
ATOM   17566  CB   ALA  2618     29.311  21.152  61.339  1.00 30.82
ATOM   17567  C    ALA  2618     27.606  21.635  63.116  1.00 32.49
ATOM   17568  O    ALA  2618     28.029  22.630  63.707  1.00 33.61
ATOM   17569  N    PHE  2619     26.308  21.411  62.931  1.00 33.51
ATOM   17570  CA   PHE  2619     25.311  22.350  63.436  1.00 33.26
ATOM   17571  CB   PHE  2619     24.524  22.962  62.280  1.00 35.56
ATOM   17572  CG   PHE  2619     25.394  23.485  61.174  1.00 37.64
ATOM   17573  CD1  PHE  2619     26.457  24.336  61.452  1.00 39.02
ATOM   17574  CD2  PHE  2619     25.156  23.119  59.852  1.00 38.68
ATOM   17575  CE1  PHE  2619     27.277  24.814  60.432  1.00 39.78
ATOM   17576  CE2  PHE  2619     25.969  23.591  58.821  1.00 39.59
ATOM   17577  CZ   PHE  2619     27.030  24.439  59.114  1.00 40.73
ATOM   17578  C    PHE  2619     24.359  21.694  64.423  1.00 32.67
ATOM   17579  O    PHE  2619     23.247  22.173  64.642  1.00 33.99
ATOM   17580  N    GLY  2620     24.806  20.596  65.023  1.00 33.38
ATOM   17581  CA   GLY  2620     23.989  19.889  65.996  1.00 32.34
ATOM   17582  C    GLY  2620     22.618  19.483  65.490  1.00 32.02
ATOM   17583  O    GLY  2620     21.715  19.214  66.283  1.00 32.91
ATOM   17584  N    ILE  2621     22.454  19.435  64.172  1.00 30.10
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ATOM   17585  CA   ILE   2621      21.176  19.046  63.589  1.00  29.00
ATOM   17586  CB   ILE   2621      21.170  19.248  62.057  1.00  26.35
ATOM   17587  CG2  ILE   2621      19.867  18.713  61.464  1.00  25.62
ATOM   17588  CG1  ILE   2621      21.332  20.730  61.729  1.00  24.08
ATOM   17589  CD1  ILE   2621      21.695  21.009  60.295  1.00  24.54
ATOM   17590  C    ILE   2621      20.900  17.581  63.895  1.00  30.31
ATOM   17591  O    ILE   2621      19.780  17.209  64.224  1.00  29.60
ATOM   17592  N    THR   2622      21.936  16.756  63.799  1.00  32.59
ATOM   17593  CA   THR   2622      21.794  15.329  64.053  1.00  35.67
ATOM   17594  CB   THR   2622      23.035  14.556  63.560  1.00  35.42
ATOM   17595  OG1  THR   2622      24.141  14.813  64.434  1.00  36.19
ATOM   17596  CG2  THR   2622      23.407  15.005  62.158  1.00  31.84
ATOM   17597  C    THR   2622      21.581  15.037  65.535  1.00  38.18
ATOM   17598  O    THR   2622      22.311  15.549  66.383  1.00  38.40
ATOM   17599  N    GLY   2623      20.571  14.220  65.827  1.00  41.10
ATOM   17600  CA   GLY   2623      20.252  13.844  67.194  1.00  46.07
ATOM   17601  C    GLY   2623      20.921  14.664  68.279  1.00  49.46
ATOM   17602  O    GLY   2623      20.755  15.884  68.342  1.00  50.21
ATOM   17603  N    GLY   2624      21.685  13.992  69.135  1.00  51.80
ATOM   17604  CA   GLY   2624      22.370  14.681  70.213  1.00  53.86
ATOM   17605  C    GLY   2624      23.726  14.086  70.538  1.00  55.07
ATOM   17606  O    GLY   2624      24.670  14.811  70.856  1.00  56.17
ATOM   17607  N    HIS   2625      23.829  12.763  70.461  1.00  55.75
ATOM   17608  CA   HIS   2625      25.088  12.087  70.754  1.00  56.39
ATOM   17609  CB   HIS   2625      24.817  10.702  71.352  1.00  58.60
ATOM   17610  CG   HIS   2625      24.122  10.744  72.678  1.00  61.61
ATOM   17611  CD2  HIS   2625      22.939  10.223  73.083  1.00  62.23
ATOM   17612  ND1  HIS   2625      24.651  11.389  73.776  1.00  62.65
ATOM   17613  CE1  HIS   2625      23.825  11.264  74.799  1.00  62.69
ATOM   17614  NE2  HIS   2625      22.778  10.561  74.406  1.00  63.05
ATOM   17615  C    HIS   2625      25.957  11.959  69.504  1.00  55.11
ATOM   17616  O    HIS   2625      26.250  10.852  69.053  1.00  55.29
ATOM   17617  N    ILE   2626      26.368  13.099  68.953  1.00  53.22
ATOM   17618  CA   ILE   2626      27.207  13.123  67.756  1.00  50.84
ATOM   17619  CB   ILE   2626      27.596  14.566  67.365  1.00  51.18
ATOM   17620  CG2  ILE   2626      26.352  15.369  67.024  1.00  52.29
ATOM   17621  CG1  ILE   2626      28.377  15.218  68.508  1.00  50.93
ATOM   17622  CD1  ILE   2626      29.050  16.524  68.131  1.00  51.04
ATOM   17623  C    ILE   2626      28.494  12.335  67.984  1.00  47.86
ATOM   17624  O    ILE   2626      28.875  12.067  69.122  1.00  47.90
ATOM   17625  N    PRO   2627      29.189  11.963  66.899  1.00  45.93
ATOM   17626  CD   PRO   2627      28.901  12.266  65.485  1.00  45.13
ATOM   17627  CA   PRO   2627      30.436  11.203  67.026  1.00  43.64
ATOM   17628  CB   PRO   2627      30.801  10.904  65.574  1.00  43.90
ATOM   17629  CG   PRO   2627      30.254  12.089  64.843  1.00  45.31
ATOM   17630  C    PRO   2627      31.533  11.973  67.762  1.00  41.87
ATOM   17631  O    PRO   2627      31.599  13.198  67.687  1.00  41.53
ATOM   17632  N    LYS   2628      32.390  11.243  68.472  1.00  40.14
ATOM   17633  CA   LYS   2628      33.486  11.846  69.224  1.00  39.09
ATOM   17634  CB   LYS   2628      34.362  10.759  69.864  1.00  41.61
ATOM   17635  CG   LYS   2628      34.081  10.500  71.340  1.00  44.14
ATOM   17636  CD   LYS   2628      32.661   9.998  71.567  1.00  46.92
ATOM   17637  CE   LYS   2628      32.359   9.839  73.051  1.00  47.79
ATOM   17638  NZ   LYS   2628      30.956   9.403  73.304  1.00  49.12
ATOM   17639  C    LYS   2628      34.372  12.748  68.376  1.00  36.45
ATOM   17640  O    LYS   2628      34.905  13.743  68.865  1.00  36.12
ATOM   17641  N    PHE   2629      34.531  12.405  67.103  1.00  32.52
ATOM   17642  CA   PHE   2629      35.387  13.189  66.224  1.00  29.15
ATOM   17643  CB   PHE   2629      35.876  12.319  65.057  1.00  29.64
ATOM   17644  CG   PHE   2629      34.772  11.753  64.216  1.00  29.08
ATOM   17645  CD1  PHE   2629      34.068  12.561  63.328  1.00  29.61
ATOM   17646  CD2  PHE   2629      34.431  10.411  64.318  1.00  30.24
ATOM   17647  CE1  PHE   2629      33.035  12.036  62.550  1.00  32.08
ATOM   17648  CE2  PHE   2629      33.403   9.873  63.550  1.00  32.17
ATOM   17649  CZ   PHE   2629      32.702  10.688  62.661  1.00  31.61
ATOM   17650  C    PHE   2629      34.742  14.458  65.692  1.00  26.59
ATOM   17651  O    PHE   2629      35.426  15.316  65.135  1.00  24.60
ATOM   17652  N    ALA   2630      33.432  14.587  65.869  1.00  24.68
ATOM   17653  CA   ALA   2630      32.720  15.764  65.388  1.00  24.35
ATOM   17654  CB   ALA   2630      31.342  15.359  64.856  1.00  24.75
ATOM   17655  C    ALA   2630      32.559  16.822  66.473  1.00  23.16
ATOM   17656  O    ALA   2630      32.719  16.539  67.659  1.00  23.58
ATOM   17657  N    LYS   2631      32.252  18.043  66.046  1.00  23.38
ATOM   17658  CA   LYS   2631      32.039  19.164  66.955  1.00  23.65
ATOM   17659  CB   LYS   2631      33.319  19.993  67.105  1.00  23.84
ATOM   17660  CG   LYS   2631      33.127  21.250  67.947  1.00  25.08
ATOM   17661  CD   LYS   2631      34.435  21.990  68.159  1.00  25.96
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ATOM	17662	CE	LYS	2631	34.227	23.261	68.968	1.00	28.22
ATOM	17663	NZ	LYS	2631	35.499	24.020	69.116	1.00	29.85
ATOM	17664	C	LYS	2631	30.921	20.068	66.444	1.00	22.92
ATOM	17665	O	LYS	2631	30.885	20.422	65.263	1.00	21.69
ATOM	17666	N	ASN	2632	30.015	20.436	67.345	1.00	23.42
ATOM	17667	CA	ASN	2632	28.889	21.310	67.026	1.00	22.87
ATOM	17668	CB	ASN	2632	27.771	21.121	68.058	1.00	22.06
ATOM	17669	CG	ASN	2632	26.566	22.005	67.792	1.00	22.77
ATOM	17670	OD1	ASN	2632	26.626	22.943	66.994	1.00	23.52
ATOM	17671	ND2	ASN	2632	25.463	21.716	68.475	1.00	20.23
ATOM	17672	C	ASN	2632	29.384	22.748	67.080	1.00	22.32
ATOM	17673	O	ASN	2632	29.559	23.306	68.167	1.00	22.04
ATOM	17674	N	PHE	2633	29.617	23.348	65.918	1.00	20.88
ATOM	17675	CA	PHE	2633	30.103	24.724	65.871	1.00	22.92
ATOM	17676	CB	PHE	2633	30.879	24.987	64.576	1.00	23.76
ATOM	17677	CG	PHE	2633	32.182	24.245	64.492	1.00	25.62
ATOM	17678	CD1	PHE	2633	32.224	22.938	64.020	1.00	25.78
ATOM	17679	CD2	PHE	2633	33.363	24.837	64.933	1.00	25.99
ATOM	17680	CE1	PHE	2633	33.421	22.229	63.988	1.00	25.39
ATOM	17681	CE2	PHE	2633	34.565	24.138	64.908	1.00	24.67
ATOM	17682	CZ	PHE	2633	34.593	22.831	64.435	1.00	27.61
ATOM	17683	C	PHE	2633	29.002	25.762	66.021	1.00	23.51
ATOM	17684	O	PHE	2633	29.287	26.940	66.230	1.00	22.07
ATOM	17685	N	LEU	2634	27.748	25.329	65.917	1.00	23.90
ATOM	17686	CA	LEU	2634	26.625	26.246	66.056	1.00	25.40
ATOM	17687	CB	LEU	2634	25.351	25.628	65.485	1.00	23.46
ATOM	17688	CG	LEU	2634	24.073	26.438	65.713	1.00	19.60
ATOM	17689	CD1	LEU	2634	24.167	27.786	65.009	1.00	19.80
ATOM	17690	CD2	LEU	2634	22.876	25.651	65.185	1.00	17.49
ATOM	17691	C	LEU	2634	26.397	26.597	67.521	1.00	28.16
ATOM	17692	O	LEU	2634	26.108	27.748	67.853	1.00	27.99
ATOM	17693	N	ALA	2635	26.516	25.592	68.384	1.00	30.92
ATOM	17694	CA	ALA	2635	26.326	25.760	69.820	1.00	36.08
ATOM	17695	CB	ALA	2635	26.545	24.434	70.529	1.00	35.24
ATOM	17696	C	ALA	2635	27.297	26.801	70.356	1.00	40.21
ATOM	17697	O	ALA	2635	26.965	27.569	71.260	1.00	41.94
ATOM	17698	N	GLU	2636	28.498	26.812	69.786	1.00	43.52
ATOM	17699	CA	GLU	2636	29.550	27.748	70.170	1.00	47.26
ATOM	17700	CB	GLU	2636	30.885	27.313	69.550	1.00	48.66
ATOM	17701	CG	GLU	2636	31.220	25.832	69.730	1.00	52.15
ATOM	17702	CD	GLU	2636	31.594	25.471	71.158	1.00	53.80
ATOM	17703	OE1	GLU	2636	30.830	25.815	72.085	1.00	55.93
ATOM	17704	OE2	GLU	2636	32.652	24.834	71.354	1.00	54.50
ATOM	17705	C	GLU	2636	29.183	29.147	69.670	1.00	47.91
ATOM	17706	O	GLU	2636	30.017	30.052	69.645	1.00	48.49
ATOM	17707	N	THR	2637	27.927	29.306	69.263	1.00	48.71
ATOM	17708	CA	THR	2637	27.418	30.575	68.764	1.00	48.27
ATOM	17709	CB	THR	2637	28.031	30.914	67.384	1.00	48.89
ATOM	17710	OG1	THR	2637	27.518	32.171	66.927	1.00	48.26
ATOM	17711	CG2	THR	2637	27.693	29.833	66.365	1.00	49.85
ATOM	17712	C	THR	2637	25.894	30.501	68.636	1.00	47.68
ATOM	17713	O	THR	2637	25.236	29.744	69.356	1.00	48.21
ATOM	17714	N	GLY	2638	25.336	31.289	67.724	1.00	45.54
ATOM	17715	CA	GLY	2638	23.898	31.283	67.526	1.00	43.10
ATOM	17716	C	GLY	2638	23.555	31.571	66.082	1.00	40.35
ATOM	17717	O	GLY	2638	22.403	31.851	65.749	1.00	40.49
ATOM	17718	N	ASP	2639	24.567	31.487	65.224	1.00	37.74
ATOM	17719	CA	ASP	2639	24.411	31.755	63.799	1.00	35.76
ATOM	17720	CB	ASP	2639	25.025	33.116	63.469	1.00	39.24
ATOM	17721	CG	ASP	2639	24.688	33.573	62.078	1.00	41.90
ATOM	17722	OD1	ASP	2639	25.570	34.144	61.405	1.00	42.76
ATOM	17723	OD2	ASP	2639	23.526	33.367	61.662	1.00	46.27
ATOM	17724	C	ASP	2639	25.110	30.676	62.967	1.00	32.25
ATOM	17725	O	ASP	2639	26.276	30.361	63.206	1.00	30.44
ATOM	17726	N	ILE	2640	24.409	30.119	61.985	1.00	28.72
ATOM	17727	CA	ILE	2640	25.005	29.083	61.149	1.00	25.76
ATOM	17728	CB	ILE	2640	23.959	28.470	60.176	1.00	25.25
ATOM	17729	CG2	ILE	2640	24.657	27.628	59.111	1.00	23.48
ATOM	17730	CG1	ILE	2640	22.952	27.638	60.969	1.00	22.50
ATOM	17731	CD1	ILE	2640	21.751	27.150	60.161	1.00	23.27
ATOM	17732	C	ILE	2640	26.204	29.612	60.358	1.00	25.06
ATOM	17733	O	ILE	2640	27.251	28.963	60.299	1.00	25.46
ATOM	17734	N	ARG	2641	26.061	30.785	59.752	1.00	24.74
ATOM	17735	CA	ARG	2641	27.169	31.356	58.993	1.00	23.19
ATOM	17736	CB	ARG	2641	26.739	32.642	58.285	1.00	22.91
ATOM	17737	CG	ARG	2641	25.858	32.392	57.077	1.00	25.25
ATOM	17738	CD	ARG	2641	25.407	33.687	56.433	1.00	24.40

ATOM	17739	NE	ARG	2641	24.650	33.441	55.210	1.00	27.34
ATOM	17740	CZ	ARG	2641	23.453	32.863	55.166	1.00	26.81
ATOM	17741	NH1	ARG	2641	22.858	32.468	56.283	1.00	25.30
ATOM	17742	NH2	ARG	2641	22.854	32.674	53.996	1.00	28.38
ATOM	17743	C	ARG	2641	28.348	31.635	59.917	1.00	23.31
ATOM	17744	O	ARG	2641	29.508	31.524	59.511	1.00	20.74
ATOM	17745	N	ALA	2642	28.047	31.992	61.162	1.00	23.35
ATOM	17746	CA	ALA	2642	29.089	32.253	62.143	1.00	25.68
ATOM	17747	CB	ALA	2642	28.484	32.881	63.404	1.00	26.54
ATOM	17748	C	ALA	2642	29.765	30.929	62.484	1.00	26.20
ATOM	17749	O	ALA	2642	30.979	30.874	62.687	1.00	26.09
ATOM	17750	N	ALA	2643	28.972	29.861	62.538	1.00	24.61
ATOM	17751	CA	ALA	2643	29.504	28.538	62.847	1.00	24.08
ATOM	17752	CB	ALA	2643	28.360	27.535	62.989	1.00	25.00
ATOM	17753	C	ALA	2643	30.460	28.098	61.738	1.00	23.31
ATOM	17754	O	ALA	2643	31.491	27.492	62.008	1.00	22.53
ATOM	17755	N	VAL	2644	30.107	28.413	60.494	1.00	23.63
ATOM	17756	CA	VAL	2644	30.932	28.066	59.340	1.00	23.56
ATOM	17757	CB	VAL	2644	30.262	28.501	58.019	1.00	23.61
ATOM	17758	CG1	VAL	2644	31.193	28.248	56.850	1.00	23.86
ATOM	17759	CG2	VAL	2644	28.953	27.737	57.817	1.00	24.12
ATOM	17760	C	VAL	2644	32.287	28.762	59.443	1.00	25.21
ATOM	17761	O	VAL	2644	33.332	28.135	59.290	1.00	23.86
ATOM	17762	N	ARG	2645	32.257	30.066	59.689	1.00	24.95
ATOM	17763	CA	ARG	2645	33.478	30.846	59.828	1.00	27.28
ATOM	17764	CB	ARG	2645	33.136	32.318	60.084	1.00	27.82
ATOM	17765	CG	ARG	2645	32.446	33.015	58.922	1.00	28.30
ATOM	17766	CD	ARG	2645	32.294	34.509	59.187	1.00	32.06
ATOM	17767	NE	ARG	2645	31.361	34.790	60.279	1.00	34.28
ATOM	17768	CZ	ARG	2645	30.060	35.018	60.120	1.00	36.23
ATOM	17769	NH1	ARG	2645	29.522	35.002	58.906	1.00	34.78
ATOM	17770	NH2	ARG	2645	29.297	35.265	61.177	1.00	37.25
ATOM	17771	C	ARG	2645	34.340	30.303	60.970	1.00	27.28
ATOM	17772	O	ARG	2645	35.561	30.227	60.849	1.00	29.76
ATOM	17773	N	GLN	2646	33.702	29.918	62.072	1.00	27.84
ATOM	17774	CA	GLN	2646	34.411	29.384	63.233	1.00	27.15
ATOM	17775	CB	GLN	2646	33.428	29.144	64.384	1.00	31.32
ATOM	17776	CG	GLN	2646	34.082	28.858	65.726	1.00	36.87
ATOM	17777	CD	GLN	2646	33.092	28.337	66.757	1.00	41.60
ATOM	17778	OE1	GLN	2646	31.974	28.849	66.878	1.00	45.33
ATOM	17779	NE2	GLN	2646	33.503	27.319	67.512	1.00	43.04
ATOM	17780	C	GLN	2646	35.108	28.074	62.879	1.00	27.46
ATOM	17781	O	GLN	2646	36.251	27.835	63.275	1.00	24.55
ATOM	17782	N	TYR	2647	34.406	27.222	62.135	1.00	24.93
ATOM	17783	CA	TYR	2647	34.946	25.936	61.719	1.00	23.55
ATOM	17784	CB	TYR	2647	33.881	25.159	60.934	1.00	22.15
ATOM	17785	CG	TYR	2647	34.399	23.949	60.194	1.00	20.81
ATOM	17786	CD1	TYR	2647	35.147	22.972	60.848	1.00	22.12
ATOM	17787	CE1	TYR	2647	35.599	21.833	60.171	1.00	22.90
ATOM	17788	CD2	TYR	2647	34.113	23.764	58.846	1.00	21.36
ATOM	17789	CE2	TYR	2647	34.555	22.632	58.160	1.00	21.37
ATOM	17790	CZ	TYR	2647	35.296	21.675	58.827	1.00	23.37
ATOM	17791	OH	TYR	2647	35.742	20.558	58.149	1.00	23.07
ATOM	17792	C	TYR	2647	36.195	26.131	60.861	1.00	23.03
ATOM	17793	O	TYR	2647	37.210	25.465	61.064	1.00	22.24
ATOM	17794	N	MET	2648	36.112	27.053	59.909	1.00	23.54
ATOM	17795	CA	MET	2648	37.233	27.341	59.023	1.00	24.40
ATOM	17796	CB	MET	2648	36.817	28.368	57.968	1.00	24.61
ATOM	17797	CG	MET	2648	35.748	27.868	57.000	1.00	25.72
ATOM	17798	SD	MET	2648	35.032	29.213	56.049	1.00	29.67
ATOM	17799	CE	MET	2648	36.345	29.525	54.905	1.00	29.14
ATOM	17800	C	MET	2648	38.420	27.870	59.816	1.00	25.45
ATOM	17801	O	MET	2648	39.573	27.589	59.490	1.00	25.58
ATOM	17802	N	ALA	2649	38.133	28.636	60.861	1.00	25.72
ATOM	17803	CA	ALA	2649	39.188	29.208	61.690	1.00	25.41
ATOM	17804	CB	ALA	2649	38.609	30.311	62.575	1.00	23.43
ATOM	17805	C	ALA	2649	39.901	28.165	62.552	1.00	25.02
ATOM	17806	O	ALA	2649	41.131	28.091	62.557	1.00	25.14
ATOM	17807	N	GLU	2650	39.133	27.361	63.280	1.00	25.28
ATOM	17808	CA	GLU	2650	39.715	26.346	64.152	1.00	26.69
ATOM	17809	CB	GLU	2650	38.622	25.662	64.981	1.00	28.05
ATOM	17810	CG	GLU	2650	38.206	26.465	66.208	1.00	29.62
ATOM	17811	CD	GLU	2650	37.113	25.799	67.014	1.00	29.84
ATOM	17812	OE1	GLU	2650	37.152	24.562	67.173	1.00	32.30
ATOM	17813	OE2	GLU	2650	36.221	26.518	67.506	1.00	33.86
ATOM	17814	C	GLU	2650	40.539	25.296	63.418	1.00	26.90
ATOM	17815	O	GLU	2650	41.482	24.738	63.980	1.00	27.32

ATOM	17816	N	VAL	2651	40.181	25.021	62.168	1.00	26.19
ATOM	17817	CA	VAL	2651	40.914	24.042	61.380	1.00	25.27
ATOM	17818	CB	VAL	2651	40.163	23.681	60.078	1.00	24.96
ATOM	17819	CG1	VAL	2651	41.063	22.849	59.179	1.00	23.48
ATOM	17820	CG2	VAL	2651	38.891	22.900	60.411	1.00	23.49
ATOM	17821	C	VAL	2651	42.296	24.576	61.010	1.00	25.94
ATOM	17822	O	VAL	2651	43.279	23.836	61.032	1.00	25.81
ATOM	17823	N	GLU	2652	42.362	25.863	60.683	1.00	27.40
ATOM	17824	CA	GLU	2652	43.616	26.493	60.293	1.00	30.89
ATOM	17825	CB	GLU	2652	43.345	27.865	59.665	1.00	31.68
ATOM	17826	CG	GLU	2652	44.595	28.556	59.129	1.00	36.32
ATOM	17827	CD	GLU	2652	44.282	29.686	58.159	1.00	39.22
ATOM	17828	OE1	GLU	2652	45.229	30.374	57.715	1.00	40.91
ATOM	17829	OE2	GLU	2652	43.091	29.885	57.836	1.00	40.55
ATOM	17830	C	GLU	2652	44.614	26.638	61.438	1.00	32.09
ATOM	17831	O	GLU	2652	45.791	26.305	61.290	1.00	32.01
ATOM	17832	N	SER	2653	44.146	27.125	62.582	1.00	34.17
ATOM	17833	CA	SER	2653	45.026	27.310	63.727	1.00	36.02
ATOM	17834	CB	SER	2653	44.427	28.338	64.687	1.00	39.04
ATOM	17835	OG	SER	2653	44.357	29.613	64.066	1.00	44.62
ATOM	17836	C	SER	2653	45.317	26.001	64.454	1.00	35.06
ATOM	17837	O	SER	2653	46.243	25.923	65.262	1.00	36.58
ATOM	17838	N	GLY	2654	44.528	24.971	64.165	1.00	33.11
ATOM	17839	CA	GLY	2654	44.754	23.679	64.789	1.00	29.91
ATOM	17840	C	GLY	2654	43.918	23.352	66.012	1.00	27.78
ATOM	17841	O	GLY	2654	44.111	22.302	66.625	1.00	30.35
ATOM	17842	N	VAL	2655	42.999	24.239	66.376	1.00	26.05
ATOM	17843	CA	VAL	2655	42.129	24.020	67.529	1.00	24.30
ATOM	17844	CB	VAL	2655	41.290	25.277	67.832	1.00	25.65
ATOM	17845	CG1	VAL	2655	40.191	24.946	68.833	1.00	27.96
ATOM	17846	CG2	VAL	2655	42.196	26.371	68.399	1.00	26.98
ATOM	17847	C	VAL	2655	41.190	22.839	67.288	1.00	23.05
ATOM	17848	O	VAL	2655	40.821	22.125	68.221	1.00	19.84
ATOM	17849	N	TYR	2656	40.807	22.644	66.030	1.00	23.31
ATOM	17850	CA	TYR	2656	39.926	21.541	65.659	1.00	23.29
ATOM	17851	CB	TYR	2656	38.554	22.054	65.203	1.00	24.58
ATOM	17852	CG	TYR	2656	37.625	20.927	64.795	1.00	26.25
ATOM	17853	CD1	TYR	2656	37.053	20.092	65.755	1.00	26.34
ATOM	17854	CE1	TYR	2656	36.272	19.000	65.389	1.00	27.58
ATOM	17855	CD2	TYR	2656	37.384	20.646	63.450	1.00	26.60
ATOM	17856	CE2	TYR	2656	36.602	19.553	63.069	1.00	26.50
ATOM	17857	CZ	TYR	2656	36.052	18.734	64.048	1.00	28.77
ATOM	17858	OH	TYR	2656	35.298	17.633	63.693	1.00	29.76
ATOM	17859	C	TYR	2656	40.539	20.739	64.520	1.00	22.07
ATOM	17860	O	TYR	2656	40.971	21.308	63.519	1.00	21.40
ATOM	17861	N	PRO	2657	40.575	19.407	64.659	1.00	23.11
ATOM	17862	CD	PRO	2657	40.839	18.474	63.551	1.00	25.30
ATOM	17863	CA	PRO	2657	40.064	18.682	65.827	1.00	25.15
ATOM	17864	CB	PRO	2657	39.863	17.266	65.293	1.00	25.49
ATOM	17865	CG	PRO	2657	40.930	17.153	64.267	1.00	26.67
ATOM	17866	C	PRO	2657	40.987	18.704	67.047	1.00	26.33
ATOM	17867	O	PRO	2657	42.194	18.937	66.934	1.00	24.35
ATOM	17868	N	GLY	2658	40.402	18.451	68.212	1.00	28.19
ATOM	17869	CA	GLY	2658	41.175	18.424	69.435	1.00	29.27
ATOM	17870	C	GLY	2658	41.405	16.990	69.870	1.00	31.45
ATOM	17871	O	GLY	2658	41.011	16.048	69.175	1.00	29.26
ATOM	17872	N	GLU	2659	42.039	16.825	71.025	1.00	31.72
ATOM	17873	CA	GLU	2659	42.328	15.506	71.568	1.00	33.60
ATOM	17874	CB	GLU	2659	43.166	15.638	72.845	1.00	35.63
ATOM	17875	CG	GLU	2659	43.629	14.310	73.412	1.00	38.07
ATOM	17876	CD	GLU	2659	44.583	13.585	72.476	1.00	40.89
ATOM	17877	OE1	GLU	2659	44.763	12.360	72.642	1.00	41.36
ATOM	17878	OE2	GLU	2659	45.156	14.245	71.582	1.00	41.02
ATOM	17879	C	GLU	2659	41.043	14.746	71.874	1.00	33.45
ATOM	17880	O	GLU	2659	41.012	13.514	71.823	1.00	33.66
ATOM	17881	N	GLU	2660	39.981	15.484	72.193	1.00	34.34
ATOM	17882	CA	GLU	2660	38.692	14.869	72.507	1.00	34.69
ATOM	17883	CB	GLU	2660	37.738	15.890	73.136	1.00	36.58
ATOM	17884	CG	GLU	2660	38.416	17.063	73.818	1.00	41.62
ATOM	17885	CD	GLU	2660	38.836	18.147	72.839	1.00	43.50
ATOM	17886	OE1	GLU	2660	37.945	18.737	72.186	1.00	43.66
ATOM	17887	OE2	GLU	2660	40.055	18.409	72.727	1.00	44.50
ATOM	17888	C	GLU	2660	38.057	14.328	71.233	1.00	33.13
ATOM	17889	O	GLU	2660	37.165	13.482	71.287	1.00	33.50
ATOM	17890	N	HIS	2661	38.526	14.827	70.093	1.00	31.20
ATOM	17891	CA	HIS	2661	38.010	14.415	68.792	1.00	29.37
ATOM	17892	CB	HIS	2661	37.777	15.643	67.903	1.00	29.29

ATOM	17893	CG	HIS	2661	36.937	16.708	68.537	1.00	29.26
ATOM	17894	CD2	HIS	2661	37.231	17.984	68.884	1.00	28.56
ATOM	17895	ND1	HIS	2661	35.613	16.517	68.868	1.00	29.92
ATOM	17896	CE1	HIS	2661	35.126	17.630	69.391	1.00	29.59
ATOM	17897	NE2	HIS	2661	36.088	18.535	69.411	1.00	28.86
ATOM	17898	C	HIS	2661	38.983	13.480	68.076	1.00	28.74
ATOM	17899	O	HIS	2661	38.755	13.119	66.924	1.00	28.41
ATOM	17900	N	SER	2662	40.055	13.088	68.761	1.00	27.65
ATOM	17901	CA	SER	2662	41.077	12.226	68.171	1.00	27.75
ATOM	17902	CB	SER	2662	42.453	12.873	68.346	1.00	24.62
ATOM	17903	OG	SER	2662	42.507	14.139	67.714	1.00	24.83
ATOM	17904	C	SER	2662	41.128	10.800	68.711	1.00	27.87
ATOM	17905	O	SER	2662	40.798	10.541	69.872	1.00	28.57
ATOM	17906	N	PHE	2663	41.562	9.876	67.857	1.00	27.35
ATOM	17907	CA	PHE	2663	41.680	8.472	68.231	1.00	27.58
ATOM	17908	CB	PHE	2663	40.990	7.581	67.195	1.00	28.72
ATOM	17909	CG	PHE	2663	39.507	7.795	67.099	1.00	28.64
ATOM	17910	CD1	PHE	2663	38.948	8.405	65.980	1.00	28.22
ATOM	17911	CD2	PHE	2663	38.664	7.369	68.123	1.00	28.60
ATOM	17912	CE1	PHE	2663	37.568	8.585	65.879	1.00	28.53
ATOM	17913	CE2	PHE	2663	37.284	7.545	68.033	1.00	28.38
ATOM	17914	CZ	PHE	2663	36.736	8.152	66.909	1.00	27.60
ATOM	17915	C	PHE	2663	43.147	8.070	68.337	1.00	29.19
ATOM	17916	O	PHE	2663	44.009	8.662	67.693	1.00	28.67
ATOM	17917	N	HIS	2664	43.425	7.061	69.154	1.00	30.62
ATOM	17918	CA	HIS	2664	44.793	6.580	69.335	1.00	33.11
ATOM	17919	CB	HIS	2664	45.390	7.136	70.631	1.00	32.47
ATOM	17920	CG	HIS	2664	45.696	8.600	70.569	1.00	31.82
ATOM	17921	CD2	HIS	2664	45.143	9.657	71.209	1.00	31.31
ATOM	17922	ND1	HIS	2664	46.670	9.119	69.743	1.00	31.66
ATOM	17923	CE1	HIS	2664	46.704	10.433	69.877	1.00	32.26
ATOM	17924	NE2	HIS	2664	45.787	10.785	70.761	1.00	31.44
ATOM	17925	C	HIS	2664	44.850	5.060	69.347	1.00	34.16
ATOM	17926	O	HIS	2664	45.924	4.517	69.013	1.00	34.77
ATOM	17927	OXT	HIS	2664	43.825	4.436	69.698	1.00	34.27
ATOM	17928	C1	KPL	2665	32.243	11.877	55.862	1.00	40.79
ATOM	17929	C2	KPL	2665	32.961	11.755	54.501	1.00	41.02
ATOM	17930	C3	KPL	2665	33.077	13.146	53.870	1.00	41.20
ATOM	17931	C4	KPL	2665	34.387	11.202	54.712	1.00	42.66
ATOM	17932	O1	KPL	2665	34.336	9.899	55.310	1.00	45.13
ATOM	17933	C5	KPL	2665	32.150	10.836	53.550	1.00	39.59
ATOM	17934	O2	KPL	2665	32.663	9.838	53.081	1.00	38.96
ATOM	17935	C6	KPL	2665	30.715	11.146	53.180	1.00	37.68
ATOM	17936	O3	KPL	2665	30.159	12.135	53.620	1.00	35.87
ATOM	17937	O4	KPL	2665	30.039	10.319	52.357	1.00	34.01
ATOM	17938	CB	MET	2701	34.899	19.058	-4.231	1.00	73.64
ATOM	17939	CG	MET	2701	35.731	17.961	-3.594	1.00	74.75
ATOM	17940	SD	MET	2701	37.148	17.478	-4.583	1.00	76.63
ATOM	17941	CE	MET	2701	36.494	16.017	-5.398	1.00	76.51
ATOM	17942	C	MET	2701	32.655	18.015	-4.580	1.00	71.20
ATOM	17943	O	MET	2701	31.627	18.329	-5.182	1.00	71.65
ATOM	17944	N	MET	2701	33.341	18.824	-2.319	1.00	71.84
ATOM	17945	CA	MET	2701	33.434	19.060	-3.787	1.00	72.13
ATOM	17946	N	LYS	2702	33.136	16.777	-4.578	1.00	69.46
ATOM	17947	CA	LYS	2702	32.480	15.710	-5.314	1.00	67.58
ATOM	17948	CB	LYS	2702	33.180	15.500	-6.657	1.00	68.24
ATOM	17949	CG	LYS	2702	33.257	16.745	-7.532	1.00	69.09
ATOM	17950	CD	LYS	2702	31.884	17.196	-8.031	1.00	69.83
ATOM	17951	CE	LYS	2702	31.288	16.208	-9.025	1.00	70.29
ATOM	17952	NZ	LYS	2702	29.978	16.690	-9.549	1.00	70.64
ATOM	17953	C	LYS	2702	32.359	14.356	-4.586	1.00	65.56
ATOM	17954	O	LYS	2702	32.309	13.312	-5.230	1.00	66.40
ATOM	17955	N	PRO	2703	32.359	14.356	-3.236	1.00	62.79
ATOM	17956	CD	PRO	2703	31.899	13.174	-2.477	1.00	62.15
ATOM	17957	CA	PRO	2703	32.399	15.527	-2.353	1.00	60.20
ATOM	17958	CB	PRO	2703	31.472	15.124	-1.221	1.00	60.98
ATOM	17959	CG	PRO	2703	31.824	13.700	-1.045	1.00	61.24
ATOM	17960	C	PRO	2703	33.838	15.784	-1.867	1.00	57.10
ATOM	17961	O	PRO	2703	34.808	15.402	-2.523	1.00	56.61
ATOM	17962	N	THR	2704	33.954	16.429	-0.711	1.00	54.53
ATOM	17963	CA	THR	2704	35.261	16.729	-0.126	1.00	51.38
ATOM	17964	CB	THR	2704	35.267	18.095	0.603	1.00	51.73
ATOM	17965	OG1	THR	2704	34.978	19.147	-0.328	1.00	52.06
ATOM	17966	CG2	THR	2704	36.630	18.346	1.240	1.00	50.43
ATOM	17967	C	THR	2704	35.628	15.647	0.884	1.00	49.86
ATOM	17968	O	THR	2704	35.041	15.571	1.963	1.00	48.30
ATOM	17969	N	THR	2705	36.605	14.819	0.532	1.00	48.07

ATOM	17970	CA	THR	2705	37.040	13.743	1.410	1.00	47.18
ATOM	17971	CB	THR	2705	37.087	12.397	0.664	1.00	46.54
ATOM	17972	OG1	THR	2705	38.071	12.459	-0.375	1.00	45.99
ATOM	17973	CG2	THR	2705	35.728	12.081	0.051	1.00	46.51
ATOM	17974	C	THR	2705	38.422	14.017	1.995	1.00	46.48
ATOM	17975	O	THR	2705	39.061	15.016	1.664	1.00	45.98
ATOM	17976	N	ILE	2706	38.875	13.119	2.864	1.00	45.87
ATOM	17977	CA	ILE	2706	40.180	13.245	3.502	1.00	45.37
ATOM	17978	CB	ILE	2706	40.461	12.049	4.438	1.00	45.76
ATOM	17979	CG2	ILE	2706	41.744	12.292	5.223	1.00	45.05
ATOM	17980	CG1	ILE	2706	39.287	11.852	5.400	1.00	47.29
ATOM	17981	CD1	ILE	2706	39.380	10.579	6.232	1.00	47.98
ATOM	17982	C	ILE	2706	41.278	13.293	2.443	1.00	45.82
ATOM	17983	O	ILE	2706	42.361	13.834	2.676	1.00	44.79
ATOM	17984	N	SER	2707	40.992	12.719	1.278	1.00	45.94
ATOM	17985	CA	SER	2707	41.949	12.697	0.174	1.00	46.20
ATOM	17986	CB	SER	2707	41.338	11.997	-1.045	1.00	46.03
ATOM	17987	OG	SER	2707	41.014	10.650	-0.758	1.00	47.96
ATOM	17988	C	SER	2707	42.380	14.110	-0.214	1.00	45.55
ATOM	17989	O	SER	2707	43.555	14.357	-0.489	1.00	44.61
ATOM	17990	N	LEU	2708	41.423	15.032	-0.236	1.00	45.78
ATOM	17991	CA	LEU	2708	41.699	16.422	-0.590	1.00	46.61
ATOM	17992	CB	LEU	2708	40.410	17.250	-0.538	1.00	47.45
ATOM	17993	CG	LEU	2708	39.904	17.852	-1.853	1.00	47.62
ATOM	17994	CD1	LEU	2708	38.612	18.619	-1.609	1.00	48.54
ATOM	17995	CD2	LEU	2708	40.960	18.772	-2.436	1.00	48.50
ATOM	17996	C	LEU	2708	42.741	17.051	0.333	1.00	46.79
ATOM	17997	O	LEU	2708	43.699	17.671	-0.133	1.00	46.13
ATOM	17998	N	LEU	2709	42.549	16.890	1.640	1.00	47.03
ATOM	17999	CA	LEU	2709	43.469	17.452	2.626	1.00	48.38
ATOM	18000	CB	LEU	2709	42.935	17.231	4.044	1.00	47.81
ATOM	18001	CG	LEU	2709	41.545	17.782	4.367	1.00	48.04
ATOM	18002	CD1	LEU	2709	41.209	17.497	5.827	1.00	46.71
ATOM	18003	CD2	LEU	2709	41.510	19.276	4.098	1.00	48.90
ATOM	18004	C	LEU	2709	44.854	16.829	2.505	1.00	49.28
ATOM	18005	O	LEU	2709	45.861	17.455	2.835	1.00	48.60
ATOM	18006	N	GLN	2710	44.895	15.589	2.032	1.00	50.99
ATOM	18007	CA	GLN	2710	46.154	14.880	1.867	1.00	52.96
ATOM	18008	CB	GLN	2710	45.893	13.391	1.632	1.00	54.28
ATOM	18009	CG	GLN	2710	47.137	12.520	1.688	1.00	57.12
ATOM	18010	CD	GLN	2710	47.721	12.419	3.087	1.00	58.97
ATOM	18011	OE1	GLN	2710	48.102	13.423	3.692	1.00	60.04
ATOM	18012	NE2	GLN	2710	47.794	11.198	3.607	1.00	59.77
ATOM	18013	C	GLN	2710	46.909	15.476	0.683	1.00	53.46
ATOM	18014	O	GLN	2710	48.096	15.790	0.787	1.00	53.06
ATOM	18015	N	LYS	2711	46.214	15.635	-0.441	1.00	53.98
ATOM	18016	CA	LYS	2711	46.824	16.205	-1.636	1.00	54.78
ATOM	18017	CB	LYS	2711	45.817	16.278	-2.789	1.00	55.24
ATOM	18018	CG	LYS	2711	46.421	16.833	-4.076	1.00	55.62
ATOM	18019	CD	LYS	2711	45.396	17.536	-4.955	1.00	57.13
ATOM	18020	CE	LYS	2711	44.346	16.586	-5.502	1.00	57.37
ATOM	18021	NZ	LYS	2711	43.404	17.307	-6.407	1.00	58.73
ATOM	18022	C	LYS	2711	47.318	17.614	-1.332	1.00	54.66
ATOM	18023	O	LYS	2711	48.382	18.025	-1.792	1.00	55.31
ATOM	18024	N	TYR	2712	46.531	18.354	-0.558	1.00	54.70
ATOM	18025	CA	TYR	2712	46.881	19.721	-0.193	1.00	54.60
ATOM	18026	CB	TYR	2712	45.796	20.328	0.698	1.00	54.84
ATOM	18027	CG	TYR	2712	44.590	20.842	-0.059	1.00	55.24
ATOM	18028	CD1	TYR	2712	43.480	21.344	0.620	1.00	55.21
ATOM	18029	CE1	TYR	2712	42.375	21.837	-0.071	1.00	55.78
ATOM	18030	CD2	TYR	2712	44.564	20.847	-1.456	1.00	55.42
ATOM	18031	CE2	TYR	2712	43.465	21.338	-2.155	1.00	55.89
ATOM	18032	CZ	TYR	2712	42.376	21.830	-1.458	1.00	55.09
ATOM	18033	OH	TYR	2712	41.290	22.313	-2.145	1.00	55.85
ATOM	18034	C	TYR	2712	48.227	19.825	0.505	1.00	54.49
ATOM	18035	O	TYR	2712	49.023	20.709	0.191	1.00	54.80
ATOM	18036	N	LYS	2713	48.485	18.928	1.450	1.00	54.67
ATOM	18037	CA	LYS	2713	49.747	18.958	2.175	1.00	55.19
ATOM	18038	CB	LYS	2713	49.787	17.860	3.241	1.00	53.74
ATOM	18039	CG	LYS	2713	51.072	17.868	4.056	1.00	52.19
ATOM	18040	CD	LYS	2713	50.915	17.134	5.372	1.00	50.87
ATOM	18041	CE	LYS	2713	52.169	17.275	6.218	1.00	50.54
ATOM	18042	NZ	LYS	2713	51.974	16.777	7.605	1.00	49.42
ATOM	18043	C	LYS	2713	50.935	18.809	1.232	1.00	55.89
ATOM	18044	O	LYS	2713	51.998	19.380	1.471	1.00	56.25
ATOM	18045	N	GLN	2714	50.753	18.042	0.161	1.00	57.18
ATOM	18046	CA	GLN	2714	51.820	17.844	-0.812	1.00	58.36

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ATOM   18047  CB   GLN  2714      51.438  16.763  -1.819  1.00 59.42
ATOM   18048  CG   GLN  2714      51.254  15.390  -1.216  1.00 61.57
ATOM   18049  CD   GLN  2714      50.997  14.336  -2.270  1.00 62.96
ATOM   18050  OE1  GLN  2714      51.813  14.134  -3.171  1.00 64.00
ATOM   18051  NE2  GLN  2714      49.859  13.656  -2.166  1.00 63.63
ATOM   18052  C    GLN  2714      52.073  19.146  -1.551  1.00 58.50
ATOM   18053  O    GLN  2714      53.217  19.563  -1.722  1.00 59.24
ATOM   18054  N    GLU  2715      50.992  19.785  -1.986  1.00 58.54
ATOM   18055  CA   GLU  2715      51.082  21.042  -2.714  1.00 58.89
ATOM   18056  CB   GLU  2715      49.783  21.294  -3.477  1.00 59.02
ATOM   18057  CG   GLU  2715      49.372  20.144  -4.373  1.00 59.98
ATOM   18058  CD   GLU  2715      48.032  20.381  -5.034  1.00 60.87
ATOM   18059  OE1  GLU  2715      47.061  20.683  -4.309  1.00 61.95
ATOM   18060  OE2  GLU  2715      47.946  20.260  -6.274  1.00 61.16
ATOM   18061  C    GLU  2715      51.352  22.199  -1.761  1.00 58.97
ATOM   18062  O    GLU  2715      51.366  23.360  -2.169  1.00 59.41
ATOM   18063  N    LYS  2716      51.563  21.874  -0.489  1.00 58.61
ATOM   18064  CA   LYS  2716      51.836  22.882   0.531  1.00 58.78
ATOM   18065  CB   LYS  2716      53.169  23.578   0.244  1.00 58.70
ATOM   18066  CG   LYS  2716      54.325  22.634  -0.032  1.00 59.65
ATOM   18067  CD   LYS  2716      54.665  21.785   1.178  1.00 60.37
ATOM   18068  CE   LYS  2716      55.783  20.805   0.853  1.00 61.03
ATOM   18069  NZ   LYS  2716      57.003  21.501   0.359  1.00 60.83
ATOM   18070  C    LYS  2716      50.722  23.924   0.561  1.00 58.16
ATOM   18071  O    LYS  2716      50.926  25.047   1.020  1.00 58.70
ATOM   18072  N    LYS  2717      49.548  23.544   0.065  1.00 57.44
ATOM   18073  CA   LYS  2717      48.400  24.442   0.024  1.00 56.21
ATOM   18074  CB   LYS  2717      47.502  24.083  -1.167  1.00 57.20
ATOM   18075  CG   LYS  2717      46.344  25.048  -1.400  1.00 58.48
ATOM   18076  CD   LYS  2717      45.574  24.717  -2.679  1.00 59.26
ATOM   18077  CE   LYS  2717      46.441  24.883  -3.925  1.00 60.27
ATOM   18078  NZ   LYS  2717      45.681  24.594  -5.174  1.00 59.88
ATOM   18079  C    LYS  2717      47.604  24.368   1.326  1.00 55.15
ATOM   18080  O    LYS  2717      46.819  23.443   1.536  1.00 55.14
ATOM   18081  N    ARG  2718      47.820  25.350   2.197  1.00 53.27
ATOM   18082  CA   ARG  2718      47.135  25.413   3.483  1.00 52.15
ATOM   18083  CB   ARG  2718      47.728  26.537   4.334  1.00 52.42
ATOM   18084  CG   ARG  2718      49.122  26.226   4.849  1.00 53.20
ATOM   18085  CD   ARG  2718      49.749  27.416   5.548  1.00 54.76
ATOM   18086  NE   ARG  2718      50.135  28.463   4.605  1.00 55.74
ATOM   18087  CZ   ARG  2718      50.810  29.557   4.944  1.00 56.58
ATOM   18088  NH1  ARG  2718      51.173  29.750   6.204  1.00 56.22
ATOM   18089  NH2  ARG  2718      51.131  30.454   4.021  1.00 57.45
ATOM   18090  C    ARG  2718      45.632  25.612   3.328  1.00 50.84
ATOM   18091  O    ARG  2718      45.182  26.468   2.565  1.00 50.29
ATOM   18092  N    PHE  2719      44.863  24.816   4.067  1.00 48.72
ATOM   18093  CA   PHE  2719      43.406  24.872   4.016  1.00 46.09
ATOM   18094  CB   PHE  2719      42.856  23.483   3.674  1.00 47.13
ATOM   18095  CG   PHE  2719      43.372  22.390   4.565  1.00 46.19
ATOM   18096  CD1  PHE  2719      42.764  22.122   5.788  1.00 46.63
ATOM   18097  CD2  PHE  2719      44.483  21.643   4.193  1.00 46.52
ATOM   18098  CE1  PHE  2719      43.257  21.124   6.628  1.00 46.28
ATOM   18099  CE2  PHE  2719      44.984  20.644   5.024  1.00 46.72
ATOM   18100  CZ   PHE  2719      44.369  20.383   6.245  1.00 46.49
ATOM   18101  C    PHE  2719      42.788  25.375   5.318  1.00 44.37
ATOM   18102  O    PHE  2719      43.406  25.307   6.381  1.00 43.11
ATOM   18103  N    ALA  2720      41.561  25.879   5.223  1.00 42.30
ATOM   18104  CA   ALA  2720      40.848  26.403   6.381  1.00 41.78
ATOM   18105  CB   ALA  2720      40.263  27.772   6.049  1.00 41.45
ATOM   18106  C    ALA  2720      39.738  25.467   6.860  1.00 40.79
ATOM   18107  O    ALA  2720      39.120  24.756   6.065  1.00 39.99
ATOM   18108  N    THR  2721      39.495  25.481   8.169  1.00 40.42
ATOM   18109  CA   THR  2721      38.459  24.659   8.797  1.00 38.92
ATOM   18110  CB   THR  2721      39.074  23.502   9.607  1.00 39.08
ATOM   18111  OG1  THR  2721      40.006  22.786   8.787  1.00 41.05
ATOM   18112  CG2  THR  2721      37.986  22.545  10.073  1.00 41.39
ATOM   18113  C    THR  2721      37.660  25.543   9.757  1.00 37.36
ATOM   18114  O    THR  2721      38.181  26.531  10.269  1.00 37.24
ATOM   18115  N    ILE  2722      36.404  25.188  10.010  1.00 34.57
ATOM   18116  CA   ILE  2722      35.575  25.983  10.907  1.00 33.33
ATOM   18117  CB   ILE  2722      34.856  27.114  10.121  1.00 33.46
ATOM   18118  CG2  ILE  2722      33.767  26.519   9.232  1.00 32.91
ATOM   18119  CG1  ILE  2722      34.256  28.136  11.091  1.00 33.34
ATOM   18120  CD1  ILE  2722      33.727  29.396  10.411  1.00 33.25
ATOM   18121  C    ILE  2722      34.539  25.121  11.633  1.00 33.03
ATOM   18122  O    ILE  2722      34.165  24.048  11.160  1.00 32.21
ATOM   18123  N    THR  2723      34.089  25.591  12.791  1.00 31.25
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ATOM	18124	CA	THR	2723	33.099	24.861	13.563	1.00	30.50
ATOM	18125	CB	THR	2723	33.120	25.275	15.044	1.00	31.78
ATOM	18126	OG1	THR	2723	32.810	26.669	15.150	1.00	33.34
ATOM	18127	CG2	THR	2723	34.489	25.014	15.648	1.00	31.14
ATOM	18128	C	THR	2723	31.716	25.143	12.996	1.00	29.87
ATOM	18129	O	THR	2723	31.491	26.174	12.360	1.00	29.14
ATOM	18130	N	ALA	2724	30.794	24.214	13.218	1.00	27.82
ATOM	18131	CA	ALA	2724	29.428	24.364	12.739	1.00	26.76
ATOM	18132	CB	ALA	2724	29.332	23.966	11.271	1.00	26.45
ATOM	18133	C	ALA	2724	28.556	23.462	13.594	1.00	26.25
ATOM	18134	O	ALA	2724	28.991	22.388	13.999	1.00	24.53
ATOM	18135	N	TYR	2725	27.336	23.905	13.877	1.00	25.34
ATOM	18136	CA	TYR	2725	26.422	23.126	14.702	1.00	25.41
ATOM	18137	CB	TYR	2725	26.441	23.634	16.145	1.00	25.02
ATOM	18138	CG	TYR	2725	27.818	23.940	16.681	1.00	25.72
ATOM	18139	CD1	TYR	2725	28.264	25.257	16.791	1.00	27.23
ATOM	18140	CE1	TYR	2725	29.534	25.548	17.278	1.00	27.51
ATOM	18141	CD2	TYR	2725	28.678	22.916	17.071	1.00	24.40
ATOM	18142	CE2	TYR	2725	29.951	23.195	17.557	1.00	27.21
ATOM	18143	CZ	TYR	2725	30.372	24.515	17.659	1.00	27.25
ATOM	18144	OH	TYR	2725	31.632	24.797	18.149	1.00	29.59
ATOM	18145	C	TYR	2725	24.996	23.188	14.181	1.00	25.48
ATOM	18146	O	TYR	2725	24.073	22.716	14.847	1.00	25.90
ATOM	18147	N	ASP	2726	24.812	23.773	12.999	1.00	24.99
ATOM	18148	CA	ASP	2726	23.475	23.895	12.424	1.00	25.25
ATOM	18149	CB	ASP	2726	22.736	25.085	13.049	1.00	24.48
ATOM	18150	CG	ASP	2726	23.368	26.424	12.701	1.00	27.30
ATOM	18151	OD1	ASP	2726	23.278	26.844	11.529	1.00	27.92
ATOM	18152	OD2	ASP	2726	23.954	27.055	13.608	1.00	26.94
ATOM	18153	C	ASP	2726	23.463	24.023	10.906	1.00	25.69
ATOM	18154	O	ASP	2726	24.482	24.317	10.282	1.00	25.88
ATOM	18155	N	TYR	2727	22.289	23.792	10.329	1.00	25.18
ATOM	18156	CA	TYR	2727	22.080	23.855	8.890	1.00	27.78
ATOM	18157	CB	TYR	2727	20.607	23.601	8.575	1.00	29.33
ATOM	18158	CG	TYR	2727	20.215	23.942	7.156	1.00	32.36
ATOM	18159	CD1	TYR	2727	20.418	23.035	6.117	1.00	33.43
ATOM	18160	CE1	TYR	2727	20.049	23.348	4.808	1.00	35.74
ATOM	18161	CD2	TYR	2727	19.636	25.177	6.853	1.00	32.74
ATOM	18162	CE2	TYR	2727	19.266	25.501	5.550	1.00	34.63
ATOM	18163	CZ	TYR	2727	19.473	24.581	4.535	1.00	34.95
ATOM	18164	OH	TYR	2727	19.090	24.890	3.250	1.00	36.38
ATOM	18165	C	TYR	2727	22.481	25.185	8.261	1.00	28.49
ATOM	18166	O	TYR	2727	23.244	25.219	7.296	1.00	26.62
ATOM	18167	N	SER	2728	21.940	26.273	8.798	1.00	29.50
ATOM	18168	CA	SER	2728	22.215	27.601	8.270	1.00	31.15
ATOM	18169	CB	SER	2728	21.606	28.670	9.174	1.00	30.32
ATOM	18170	OG	SER	2728	20.195	28.606	9.127	1.00	30.03
ATOM	18171	C	SER	2728	23.691	27.885	8.063	1.00	32.53
ATOM	18172	O	SER	2728	24.151	28.017	6.927	1.00	34.08
ATOM	18173	N	PHE	2729	24.441	27.979	9.152	1.00	33.01
ATOM	18174	CA	PHE	2729	25.860	28.263	9.026	1.00	34.03
ATOM	18175	CB	PHE	2729	26.514	28.379	10.402	1.00	32.92
ATOM	18176	CG	PHE	2729	26.244	29.689	11.084	1.00	33.06
ATOM	18177	CD1	PHE	2729	25.190	29.824	11.979	1.00	32.75
ATOM	18178	CD2	PHE	2729	27.041	30.800	10.816	1.00	33.37
ATOM	18179	CE1	PHE	2729	24.934	31.046	12.601	1.00	33.58
ATOM	18180	CE2	PHE	2729	26.793	32.024	11.430	1.00	33.46
ATOM	18181	CZ	PHE	2729	25.738	32.148	12.325	1.00	33.47
ATOM	18182	C	PHE	2729	26.598	27.241	8.171	1.00	34.90
ATOM	18183	O	PHE	2729	27.417	27.614	7.333	1.00	35.39
ATOM	18184	N	ALA	2730	26.310	25.958	8.367	1.00	34.77
ATOM	18185	CA	ALA	2730	26.968	24.919	7.582	1.00	34.81
ATOM	18186	CB	ALA	2730	26.409	23.544	7.949	1.00	34.81
ATOM	18187	C	ALA	2730	26.744	25.198	6.099	1.00	34.77
ATOM	18188	O	ALA	2730	27.638	25.002	5.275	1.00	34.75
ATOM	18189	N	LYS	2731	25.540	25.659	5.777	1.00	35.58
ATOM	18190	CA	LYS	2731	25.154	25.983	4.408	1.00	36.11
ATOM	18191	CB	LYS	2731	23.657	26.294	4.361	1.00	37.50
ATOM	18192	CG	LYS	2731	23.151	26.818	3.033	1.00	38.67
ATOM	18193	CD	LYS	2731	23.122	25.740	1.977	1.00	40.61
ATOM	18194	CE	LYS	2731	22.524	26.278	0.685	1.00	42.74
ATOM	18195	NZ	LYS	2731	22.418	25.227	-0.361	1.00	43.93
ATOM	18196	C	LYS	2731	25.938	27.189	3.909	1.00	36.82
ATOM	18197	O	LYS	2731	26.426	27.204	2.777	1.00	35.95
ATOM	18198	N	LEU	2732	26.048	28.198	4.766	1.00	37.43
ATOM	18199	CA	LEU	2732	26.762	29.421	4.434	1.00	38.34
ATOM	18200	CB	LEU	2732	26.576	30.449	5.558	1.00	38.63

ATOM	18201	CG	LEU	2732	27.150	31.858	5.367	1.00	38.74
ATOM	18202	CD1	LEU	2732	26.427	32.832	6.281	1.00	37.58
ATOM	18203	CD2	LEU	2732	28.643	31.853	5.652	1.00	38.30
ATOM	18204	C	LEU	2732	28.247	29.163	4.179	1.00	38.90
ATOM	18205	O	LEU	2732	28.830	29.742	3.264	1.00	39.61
ATOM	18206	N	PHE	2733	28.861	28.292	4.976	1.00	38.38
ATOM	18207	CA	PHE	2733	30.278	27.992	4.793	1.00	39.32
ATOM	18208	CB	PHE	2733	30.828	27.199	5.984	1.00	38.73
ATOM	18209	CG	PHE	2733	30.623	27.870	7.314	1.00	38.08
ATOM	18210	CD1	PHE	2733	30.813	29.241	7.459	1.00	37.35
ATOM	18211	CD2	PHE	2733	30.267	27.123	8.430	1.00	36.25
ATOM	18212	CE1	PHE	2733	30.652	29.856	8.698	1.00	36.41
ATOM	18213	CE2	PHE	2733	30.104	27.729	9.671	1.00	36.51
ATOM	18214	CZ	PHE	2733	30.297	29.098	9.804	1.00	36.45
ATOM	18215	C	PHE	2733	30.509	27.192	3.514	1.00	39.89
ATOM	18216	O	PHE	2733	31.449	27.455	2.764	1.00	39.04
ATOM	18217	N	ALA	2734	29.642	26.213	3.274	1.00	40.69
ATOM	18218	CA	ALA	2734	29.746	25.366	2.094	1.00	42.63
ATOM	18219	CB	ALA	2734	28.712	24.246	2.166	1.00	41.54
ATOM	18220	C	ALA	2734	29.564	26.157	0.800	1.00	44.13
ATOM	18221	O	ALA	2734	30.273	25.926	-0.177	1.00	44.26
ATOM	18222	N	ASP	2735	28.612	27.085	0.795	1.00	45.42
ATOM	18223	CA	ASP	2735	28.354	27.889	-0.394	1.00	47.29
ATOM	18224	CB	ASP	2735	27.145	28.802	-0.185	1.00	47.94
ATOM	18225	CG	ASP	2735	25.840	28.038	-0.114	1.00	49.27
ATOM	18226	OD1	ASP	2735	25.710	27.008	-0.815	1.00	49.87
ATOM	18227	OD2	ASP	2735	24.937	28.478	0.630	1.00	49.47
ATOM	18228	C	ASP	2735	29.555	28.738	-0.794	1.00	47.96
ATOM	18229	O	ASP	2735	29.759	29.013	-1.976	1.00	47.45
ATOM	18230	N	GLU	2736	30.343	29.154	0.193	1.00	48.95
ATOM	18231	CA	GLU	2736	31.520	29.976	-0.062	1.00	50.11
ATOM	18232	CB	GLU	2736	31.884	30.780	1.187	1.00	50.79
ATOM	18233	CG	GLU	2736	30.787	31.710	1.663	1.00	51.69
ATOM	18234	CD	GLU	2736	30.351	32.690	0.594	1.00	52.87
ATOM	18235	OE1	GLU	2736	31.200	33.477	0.129	1.00	54.23
ATOM	18236	OE2	GLU	2736	29.160	32.673	0.219	1.00	52.97
ATOM	18237	C	GLU	2736	32.717	29.139	-0.494	1.00	50.56
ATOM	18238	O	GLU	2736	33.330	29.405	-1.528	1.00	51.77
ATOM	18239	N	GLY	2737	33.051	28.127	0.299	1.00	50.60
ATOM	18240	CA	GLY	2737	34.181	27.281	-0.044	1.00	49.87
ATOM	18241	C	GLY	2737	34.630	26.374	1.082	1.00	49.32
ATOM	18242	O	GLY	2737	35.293	25.367	0.839	1.00	49.07
ATOM	18243	N	LEU	2738	34.281	26.735	2.313	1.00	49.01
ATOM	18244	CA	LEU	2738	34.646	25.936	3.475	1.00	48.38
ATOM	18245	CB	LEU	2738	34.252	26.658	4.765	1.00	48.66
ATOM	18246	CG	LEU	2738	35.241	27.691	5.301	1.00	47.93
ATOM	18247	CD1	LEU	2738	34.628	28.435	6.473	1.00	47.98
ATOM	18248	CD2	LEU	2738	36.523	26.992	5.726	1.00	49.25
ATOM	18249	C	LEU	2738	33.958	24.579	3.418	1.00	47.74
ATOM	18250	O	LEU	2738	32.781	24.457	3.757	1.00	48.29
ATOM	18251	N	ASN	2739	34.701	23.564	2.986	1.00	46.36
ATOM	18252	CA	ASN	2739	34.168	22.214	2.873	1.00	45.27
ATOM	18253	CB	ASN	2739	34.513	21.624	1.502	1.00	46.52
ATOM	18254	CG	ASN	2739	34.170	22.564	0.356	1.00	48.47
ATOM	18255	OD1	ASN	2739	33.080	23.142	0.315	1.00	49.82
ATOM	18256	ND2	ASN	2739	35.096	22.714	-0.586	1.00	48.29
ATOM	18257	C	ASN	2739	34.733	21.319	3.975	1.00	43.36
ATOM	18258	O	ASN	2739	34.751	20.097	3.850	1.00	44.23
ATOM	18259	N	VAL	2740	35.196	21.938	5.054	1.00	40.65
ATOM	18260	CA	VAL	2740	35.753	21.200	6.179	1.00	38.58
ATOM	18261	CB	VAL	2740	37.294	21.276	6.180	1.00	39.42
ATOM	18262	CG1	VAL	2740	37.863	20.397	7.282	1.00	38.41
ATOM	18263	CG2	VAL	2740	37.836	20.840	4.826	1.00	39.41
ATOM	18264	C	VAL	2740	35.206	21.797	7.472	1.00	37.55
ATOM	18265	O	VAL	2740	35.670	22.843	7.932	1.00	36.45
ATOM	18266	N	MET	2741	34.213	21.128	8.052	1.00	35.79
ATOM	18267	CA	MET	2741	33.586	21.605	9.280	1.00	33.14
ATOM	18268	CB	MET	2741	32.097	21.858	9.019	1.00	33.81
ATOM	18269	CG	MET	2741	31.862	23.092	8.157	1.00	33.62
ATOM	18270	SD	MET	2741	30.216	23.250	7.476	1.00	35.47
ATOM	18271	CE	MET	2741	30.583	23.290	5.712	1.00	31.93
ATOM	18272	C	MET	2741	33.781	20.666	10.466	1.00	31.98
ATOM	18273	O	MET	2741	33.970	19.461	10.301	1.00	30.77
ATOM	18274	N	LEU	2742	33.737	21.228	11.666	1.00	30.44
ATOM	18275	CA	LEU	2742	33.927	20.442	12.870	1.00	29.16
ATOM	18276	CB	LEU	2742	35.268	20.818	13.517	1.00	31.59
ATOM	18277	CG	LEU	2742	35.690	20.194	14.857	1.00	34.91

ATOM	18278	CD1	LEU	2742	34.985	20.907	15.998	1.00	36.28
ATOM	18279	CD2	LEU	2742	35.382	18.698	14.872	1.00	35.47
ATOM	18280	C	LEU	2742	32.784	20.603	13.871	1.00	28.08
ATOM	18281	O	LEU	2742	32.471	21.710	14.315	1.00	26.39
ATOM	18282	N	VAL	2743	32.154	19.479	14.205	1.00	26.29
ATOM	18283	CA	VAL	2743	31.058	19.457	15.165	1.00	24.79
ATOM	18284	CB	VAL	2743	29.926	18.504	14.705	1.00	24.91
ATOM	18285	CG1	VAL	2743	28.798	18.501	15.733	1.00	23.46
ATOM	18286	CG2	VAL	2743	29.399	18.927	13.336	1.00	23.03
ATOM	18287	C	VAL	2743	31.660	18.942	16.468	1.00	25.50
ATOM	18288	O	VAL	2743	31.584	17.751	16.765	1.00	24.89
ATOM	18289	N	GLY	2744	32.271	19.846	17.234	1.00	25.53
ATOM	18290	CA	GLY	2744	32.909	19.460	18.482	1.00	24.69
ATOM	18291	C	GLY	2744	32.088	19.678	19.739	1.00	25.51
ATOM	18292	O	GLY	2744	31.083	20.389	19.727	1.00	23.34
ATOM	18293	N	ASP	2745	32.530	19.059	20.829	1.00	26.45
ATOM	18294	CA	ASP	2745	31.846	19.170	22.109	1.00	27.04
ATOM	18295	CB	ASP	2745	32.468	18.218	23.136	1.00	28.02
ATOM	18296	CG	ASP	2745	33.963	18.422	23.283	1.00	31.06
ATOM	18297	OD1	ASP	2745	34.442	19.544	23.010	1.00	31.67
ATOM	18298	OD2	ASP	2745	34.655	17.469	23.674	1.00	33.16
ATOM	18299	C	ASP	2745	31.888	20.599	22.646	1.00	27.84
ATOM	18300	O	ASP	2745	31.295	20.902	23.682	1.00	26.58
ATOM	18301	N	SER	2746	32.598	21.476	21.946	1.00	27.48
ATOM	18302	CA	SER	2746	32.675	22.864	22.368	1.00	26.36
ATOM	18303	CB	SER	2746	33.541	23.670	21.397	1.00	26.95
ATOM	18304	OG	SER	2746	33.076	23.552	20.064	1.00	29.19
ATOM	18305	C	SER	2746	31.254	23.417	22.398	1.00	27.45
ATOM	18306	O	SER	2746	30.946	24.342	23.154	1.00	26.43
ATOM	18307	N	LEU	2747	30.388	22.830	21.575	1.00	25.07
ATOM	18308	CA	LEU	2747	28.988	23.244	21.501	1.00	24.80
ATOM	18309	CB	LEU	2747	28.220	22.325	20.539	1.00	24.87
ATOM	18310	CG	LEU	2747	28.127	20.828	20.860	1.00	26.63
ATOM	18311	CD1	LEU	2747	26.966	20.567	21.816	1.00	25.96
ATOM	18312	CD2	LEU	2747	27.912	20.050	19.564	1.00	25.74
ATOM	18313	C	LEU	2747	28.343	23.215	22.887	1.00	22.90
ATOM	18314	O	LEU	2747	27.315	23.851	23.122	1.00	22.29
ATOM	18315	N	GLY	2748	28.952	22.473	23.805	1.00	22.88
ATOM	18316	CA	GLY	2748	28.414	22.396	25.151	1.00	25.99
ATOM	18317	C	GLY	2748	28.449	23.744	25.842	1.00	27.51
ATOM	18318	O	GLY	2748	27.725	23.975	26.810	1.00	27.90
ATOM	18319	N	MET	2749	29.291	24.641	25.342	1.00	29.54
ATOM	18320	CA	MET	2749	29.411	25.970	25.930	1.00	30.31
ATOM	18321	CB	MET	2749	30.884	26.294	26.194	1.00	32.91
ATOM	18322	CG	MET	2749	31.546	25.370	27.208	1.00	35.18
ATOM	18323	SD	MET	2749	33.294	25.754	27.464	1.00	42.41
ATOM	18324	CE	MET	2749	33.162	27.152	28.569	1.00	40.70
ATOM	18325	C	MET	2749	28.798	27.044	25.042	1.00	29.17
ATOM	18326	O	MET	2749	28.003	27.863	25.500	1.00	30.78
ATOM	18327	N	THR	2750	29.162	27.029	23.767	1.00	28.64
ATOM	18328	CA	THR	2750	28.662	28.016	22.827	1.00	28.34
ATOM	18329	CB	THR	2750	29.546	28.057	21.570	1.00	29.53
ATOM	18330	OG1	THR	2750	29.124	29.130	20.718	1.00	33.35
ATOM	18331	CG2	THR	2750	29.450	26.744	20.816	1.00	29.90
ATOM	18332	C	THR	2750	27.213	27.787	22.409	1.00	27.81
ATOM	18333	O	THR	2750	26.495	28.731	22.073	1.00	27.33
ATOM	18334	N	VAL	2751	26.779	26.533	22.425	1.00	27.07
ATOM	18335	CA	VAL	2751	25.411	26.220	22.033	1.00	26.65
ATOM	18336	CB	VAL	2751	25.380	25.004	21.076	1.00	27.34
ATOM	18337	CG1	VAL	2751	23.945	24.661	20.717	1.00	25.72
ATOM	18338	CG2	VAL	2751	26.182	25.316	19.817	1.00	27.61
ATOM	18339	C	VAL	2751	24.508	25.940	23.231	1.00	25.59
ATOM	18340	O	VAL	2751	23.459	26.565	23.380	1.00	25.62
ATOM	18341	N	GLN	2752	24.924	25.008	24.085	1.00	25.08
ATOM	18342	CA	GLN	2752	24.140	24.633	25.261	1.00	25.15
ATOM	18343	CB	GLN	2752	24.556	23.237	25.735	1.00	25.01
ATOM	18344	CG	GLN	2752	24.136	22.122	24.776	1.00	21.90
ATOM	18345	CD	GLN	2752	24.763	20.776	25.103	1.00	19.31
ATOM	18346	OE1	GLN	2752	25.425	20.616	26.126	1.00	20.25
ATOM	18347	NE2	GLN	2752	24.563	19.802	24.223	1.00	16.51
ATOM	18348	C	GLN	2752	24.248	25.637	26.406	1.00	27.38
ATOM	18349	O	GLN	2752	23.303	25.818	27.179	1.00	26.43
ATOM	18350	N	GLY	2753	25.401	26.286	26.522	1.00	27.57
ATOM	18351	CA	GLY	2753	25.577	27.273	27.574	1.00	29.69
ATOM	18352	C	GLY	2753	26.144	26.765	28.886	1.00	30.82
ATOM	18353	O	GLY	2753	25.954	27.394	29.928	1.00	30.56
ATOM	18354	N	HIS	2754	26.836	25.631	28.842	1.00	30.11

ATOM	18355	CA	HIS	2754	27.448	25.063	30.036	1.00	32.21
ATOM	18356	CB	HIS	2754	27.639	23.557	29.877	1.00	33.27
ATOM	18357	CG	HIS	2754	26.359	22.794	29.763	1.00	34.86
ATOM	18358	CD2	HIS	2754	25.852	22.052	28.751	1.00	34.88
ATOM	18359	ND1	HIS	2754	25.433	22.735	30.783	1.00	35.48
ATOM	18360	CE1	HIS	2754	24.411	21.988	30.404	1.00	35.76
ATOM	18361	NE2	HIS	2754	24.641	21.562	29.175	1.00	35.21
ATOM	18362	C	HIS	2754	28.808	25.721	30.258	1.00	33.24
ATOM	18363	O	HIS	2754	29.329	26.392	29.365	1.00	31.50
ATOM	18364	N	ASP	2755	29.381	25.511	31.442	1.00	34.08
ATOM	18365	CA	ASP	2755	30.678	26.084	31.795	1.00	35.48
ATOM	18366	CB	ASP	2755	30.789	26.256	33.319	1.00	38.54
ATOM	18367	CG	ASP	2755	30.687	24.941	34.070	1.00	40.66
ATOM	18368	OD1	ASP	2755	31.598	24.093	33.934	1.00	44.22
ATOM	18369	OD2	ASP	2755	29.694	24.749	34.805	1.00	43.84
ATOM	18370	C	ASP	2755	31.841	25.240	31.285	1.00	35.23
ATOM	18371	O	ASP	2755	32.999	25.650	31.363	1.00	36.04
ATOM	18372	N	SER	2756	31.531	24.055	30.770	1.00	33.43
ATOM	18373	CA	SER	2756	32.550	23.161	30.239	1.00	31.37
ATOM	18374	CB	SER	2756	33.111	22.252	31.339	1.00	29.97
ATOM	18375	OG	SER	2756	32.155	21.301	31.769	1.00	28.60
ATOM	18376	C	SER	2756	31.929	22.316	29.134	1.00	30.66
ATOM	18377	O	SER	2756	30.767	22.506	28.776	1.00	29.90
ATOM	18378	N	THR	2757	32.708	21.382	28.601	1.00	30.30
ATOM	18379	CA	THR	2757	32.236	20.520	27.526	1.00	29.72
ATOM	18380	CB	THR	2757	33.296	20.404	26.415	1.00	29.31
ATOM	18381	OG1	THR	2757	34.491	19.832	26.957	1.00	27.82
ATOM	18382	CG2	THR	2757	33.615	21.773	25.831	1.00	29.02
ATOM	18383	C	THR	2757	31.889	19.109	28.009	1.00	29.19
ATOM	18384	O	THR	2757	31.433	18.275	27.227	1.00	28.12
ATOM	18385	N	LEU	2758	32.107	18.842	29.293	1.00	28.20
ATOM	18386	CA	LEU	2758	31.824	17.519	29.849	1.00	27.55
ATOM	18387	CB	LEU	2758	32.241	17.453	31.322	1.00	28.03
ATOM	18388	CG	LEU	2758	33.689	17.047	31.630	1.00	29.70
ATOM	18389	CD1	LEU	2758	34.658	18.019	30.978	1.00	30.55
ATOM	18390	CD2	LEU	2758	33.895	17.011	33.135	1.00	30.83
ATOM	18391	C	LEU	2758	30.367	17.072	29.716	1.00	26.67
ATOM	18392	O	LEU	2758	30.095	15.899	29.450	1.00	26.40
ATOM	18393	N	PRO	2759	29.412	17.993	29.908	1.00	26.39
ATOM	18394	CD	PRO	2759	29.559	19.394	30.346	1.00	28.12
ATOM	18395	CA	PRO	2759	27.995	17.626	29.795	1.00	26.06
ATOM	18396	CB	PRO	2759	27.269	18.895	30.250	1.00	28.18
ATOM	18397	CG	PRO	2759	28.250	19.993	29.929	1.00	27.99
ATOM	18398	C	PRO	2759	27.560	17.161	28.401	1.00	25.95
ATOM	18399	O	PRO	2759	26.499	16.557	28.244	1.00	24.22
ATOM	18400	N	VAL	2760	28.378	17.435	27.389	1.00	24.76
ATOM	18401	CA	VAL	2760	28.045	17.037	26.022	1.00	23.60
ATOM	18402	CB	VAL	2760	28.999	17.697	24.999	1.00	23.62
ATOM	18403	CG1	VAL	2760	28.613	17.292	23.592	1.00	23.23
ATOM	18404	CG2	VAL	2760	28.949	19.204	25.135	1.00	24.42
ATOM	18405	C	VAL	2760	28.120	15.528	25.853	1.00	21.28
ATOM	18406	O	VAL	2760	29.142	14.912	26.145	1.00	21.37
ATOM	18407	N	THR	2761	27.041	14.914	25.381	1.00	21.58
ATOM	18408	CA	THR	2761	27.096	13.475	25.205	1.00	22.07
ATOM	18409	CB	THR	2761	26.038	12.765	26.109	1.00	25.74
ATOM	18410	OG1	THR	2761	25.041	13.706	26.540	1.00	27.70
ATOM	18411	CG2	THR	2761	26.713	12.205	27.362	1.00	29.26
ATOM	18412	C	THR	2761	27.007	13.062	23.731	1.00	20.47
ATOM	18413	O	THR	2761	26.850	13.907	22.851	1.00	18.18
ATOM	18414	N	VAL	2762	27.146	11.769	23.466	1.00	17.63
ATOM	18415	CA	VAL	2762	27.127	11.268	22.102	1.00	18.14
ATOM	18416	CB	VAL	2762	27.260	9.724	22.092	1.00	16.98
ATOM	18417	CG1	VAL	2762	27.180	9.186	20.676	1.00	18.56
ATOM	18418	CG2	VAL	2762	28.601	9.330	22.709	1.00	17.91
ATOM	18419	C	VAL	2762	25.884	11.699	21.335	1.00	17.74
ATOM	18420	O	VAL	2762	25.986	12.166	20.204	1.00	20.33
ATOM	18421	N	ALA	2763	24.714	11.555	21.950	1.00	16.50
ATOM	18422	CA	ALA	2763	23.461	11.939	21.308	1.00	16.78
ATOM	18423	CB	ALA	2763	22.291	11.727	22.274	1.00	17.39
ATOM	18424	C	ALA	2763	23.475	13.387	20.814	1.00	16.99
ATOM	18425	O	ALA	2763	22.967	13.679	19.732	1.00	16.49
ATOM	18426	N	ASP	2764	24.049	14.289	21.607	1.00	16.36
ATOM	18427	CA	ASP	2764	24.118	15.696	21.228	1.00	17.12
ATOM	18428	CB	ASP	2764	24.719	16.544	22.355	1.00	16.73
ATOM	18429	CG	ASP	2764	23.886	16.518	23.622	1.00	18.74
ATOM	18430	OD1	ASP	2764	22.638	16.468	23.530	1.00	17.10
ATOM	18431	OD2	ASP	2764	24.482	16.570	24.718	1.00	18.91

ATOM	18432	C	ASP	2764	24.968	15.875	19.977	1.00	16.55
ATOM	18433	O	ASP	2764	24.617	16.642	19.084	1.00	15.59
ATOM	18434	N	ILE	2765	26.094	15.171	19.923	1.00	17.15
ATOM	18435	CA	ILE	2765	26.991	15.261	18.774	1.00	18.11
ATOM	18436	CB	ILE	2765	28.270	14.399	18.985	1.00	18.63
ATOM	18437	CG2	ILE	2765	29.151	14.452	17.740	1.00	19.14
ATOM	18438	CG1	ILE	2765	29.057	14.901	20.207	1.00	18.27
ATOM	18439	CD1	ILE	2765	29.657	16.300	20.041	1.00	20.11
ATOM	18440	C	ILE	2765	26.263	14.787	17.509	1.00	18.09
ATOM	18441	O	ILE	2765	26.328	15.432	16.461	1.00	17.25
ATOM	18442	N	ALA	2766	25.563	13.661	17.615	1.00	17.05
ATOM	18443	CA	ALA	2766	24.831	13.106	16.478	1.00	16.59
ATOM	18444	CB	ALA	2766	24.201	11.765	16.858	1.00	18.04
ATOM	18445	C	ALA	2766	23.749	14.060	15.983	1.00	16.20
ATOM	18446	O	ALA	2766	23.486	14.167	14.778	1.00	14.36
ATOM	18447	N	TYR	2767	23.099	14.737	16.921	1.00	15.60
ATOM	18448	CA	TYR	2767	22.048	15.682	16.578	1.00	17.66
ATOM	18449	CB	TYR	2767	21.439	16.269	17.853	1.00	17.15
ATOM	18450	CG	TYR	2767	20.432	17.370	17.611	1.00	18.50
ATOM	18451	CD1	TYR	2767	19.212	16.998	16.998	1.00	19.60
ATOM	18452	CE1	TYR	2767	18.269	18.113	16.811	1.00	19.55
ATOM	18453	CD2	TYR	2767	20.689	18.671	18.028	1.00	20.43
ATOM	18454	CE2	TYR	2767	19.754	19.684	17.845	1.00	17.99
ATOM	18455	CZ	TYR	2767	18.547	19.396	17.238	1.00	20.45
ATOM	18456	OH	TYR	2767	17.607	20.389	17.067	1.00	19.83
ATOM	18457	C	TYR	2767	22.612	16.812	15.715	1.00	18.01
ATOM	18458	O	TYR	2767	22.130	17.075	14.614	1.00	19.81
ATOM	18459	N	HIS	2768	23.639	17.482	16.220	1.00	19.41
ATOM	18460	CA	HIS	2768	24.239	18.581	15.479	1.00	18.71
ATOM	18461	CB	HIS	2768	25.205	19.354	16.387	1.00	18.01
ATOM	18462	CG	HIS	2768	24.513	20.100	17.490	1.00	19.91
ATOM	18463	CD2	HIS	2768	24.343	19.799	18.801	1.00	20.46
ATOM	18464	ND1	HIS	2768	23.816	21.271	17.275	1.00	19.52
ATOM	18465	CE1	HIS	2768	23.246	21.657	18.403	1.00	19.84
ATOM	18466	NE2	HIS	2768	23.549	20.782	19.344	1.00	19.32
ATOM	18467	C	HIS	2768	24.929	18.102	14.199	1.00	17.93
ATOM	18468	O	HIS	2768	24.916	18.802	13.185	1.00	17.64
ATOM	18469	N	THR	2769	25.508	16.904	14.234	1.00	17.47
ATOM	18470	CA	THR	2769	26.183	16.352	13.064	1.00	18.99
ATOM	18471	CB	THR	2769	26.810	14.970	13.381	1.00	19.01
ATOM	18472	OG1	THR	2769	27.915	15.147	14.269	1.00	19.38
ATOM	18473	CG2	THR	2769	27.295	14.277	12.109	1.00	19.98
ATOM	18474	C	THR	2769	25.207	16.216	11.894	1.00	19.84
ATOM	18475	O	THR	2769	25.539	16.554	10.759	1.00	20.75
ATOM	18476	N	ALA	2770	24.005	15.720	12.173	1.00	18.34
ATOM	18477	CA	ALA	2770	22.997	15.563	11.137	1.00	20.30
ATOM	18478	CB	ALA	2770	21.784	14.809	11.686	1.00	19.96
ATOM	18479	C	ALA	2770	22.562	16.923	10.586	1.00	19.65
ATOM	18480	O	ALA	2770	22.303	17.058	9.387	1.00	19.44
ATOM	18481	N	ALA	2771	22.481	17.931	11.453	1.00	19.52
ATOM	18482	CA	ALA	2771	22.083	19.265	11.010	1.00	19.17
ATOM	18483	CB	ALA	2771	21.887	20.199	12.213	1.00	18.60
ATOM	18484	C	ALA	2771	23.146	19.828	10.072	1.00	19.51
ATOM	18485	O	ALA	2771	22.833	20.325	8.993	1.00	20.21
ATOM	18486	N	VAL	2772	24.405	19.740	10.481	1.00	20.13
ATOM	18487	CA	VAL	2772	25.498	20.238	9.653	1.00	22.46
ATOM	18488	CB	VAL	2772	26.864	19.996	10.332	1.00	22.59
ATOM	18489	CG1	VAL	2772	27.998	20.293	9.355	1.00	22.59
ATOM	18490	CG2	VAL	2772	26.983	20.869	11.575	1.00	20.73
ATOM	18491	C	VAL	2772	25.485	19.544	8.291	1.00	23.49
ATOM	18492	O	VAL	2772	25.567	20.198	7.252	1.00	23.77
ATOM	18493	N	ARG	2773	25.375	18.219	8.307	1.00	23.50
ATOM	18494	CA	ARG	2773	25.352	17.435	7.079	1.00	23.91
ATOM	18495	CB	ARG	2773	25.182	15.949	7.402	1.00	23.75
ATOM	18496	CG	ARG	2773	25.032	15.065	6.181	1.00	24.41
ATOM	18497	CD	ARG	2773	26.215	15.217	5.241	1.00	25.43
ATOM	18498	NE	ARG	2773	27.458	14.746	5.840	1.00	25.65
ATOM	18499	CZ	ARG	2773	28.661	14.919	5.301	1.00	27.67
ATOM	18500	NH1	ARG	2773	28.787	15.560	4.147	1.00	27.55
ATOM	18501	NH2	ARG	2773	29.742	14.449	5.912	1.00	24.82
ATOM	18502	C	ARG	2773	24.260	17.873	6.107	1.00	23.35
ATOM	18503	O	ARG	2773	24.485	17.909	4.897	1.00	25.70
ATOM	18504	N	ARG	2774	23.081	18.198	6.626	1.00	23.07
ATOM	18505	CA	ARG	2774	21.979	18.639	5.777	1.00	24.60
ATOM	18506	CB	ARG	2774	20.698	18.814	6.597	1.00	24.60
ATOM	18507	CG	ARG	2774	20.163	17.532	7.217	1.00	25.89
ATOM	18508	CD	ARG	2774	18.759	17.730	7.780	1.00	27.00

ATOM	18509	NE	ARG	2774	18.237	16.502	8.381	1.00	26.44
ATOM	18510	CZ	ARG	2774	18.464	16.116	9.634	1.00	27.67
ATOM	18511	NH1	ARG	2774	19.203	16.862	10.445	1.00	26.75
ATOM	18512	NH2	ARG	2774	17.953	14.976	10.078	1.00	29.16
ATOM	18513	C	ARG	2774	22.329	19.962	5.107	1.00	26.29
ATOM	18514	O	ARG	2774	21.917	20.225	3.975	1.00	25.64
ATOM	18515	N	GLY	2775	23.095	20.786	5.818	1.00	26.82
ATOM	18516	CA	GLY	2775	23.491	22.081	5.295	1.00	29.16
ATOM	18517	C	GLY	2775	24.688	22.025	4.365	1.00	30.64
ATOM	18518	O	GLY	2775	24.869	22.911	3.528	1.00	30.02
ATOM	18519	N	ALA	2776	25.506	20.987	4.517	1.00	30.40
ATOM	18520	CA	ALA	2776	26.694	20.802	3.691	1.00	32.03
ATOM	18521	CB	ALA	2776	27.914	21.368	4.403	1.00	31.76
ATOM	18522	C	ALA	2776	26.900	19.315	3.404	1.00	32.26
ATOM	18523	O	ALA	2776	27.754	18.670	4.006	1.00	33.25
ATOM	18524	N	PRO	2777	26.118	18.753	2.470	1.00	32.99
ATOM	18525	CD	PRO	2777	25.068	19.418	1.678	1.00	33.32
ATOM	18526	CA	PRO	2777	26.215	17.335	2.109	1.00	33.05
ATOM	18527	CB	PRO	2777	25.007	17.135	1.202	1.00	34.47
ATOM	18528	CG	PRO	2777	24.886	18.461	0.526	1.00	34.66
ATOM	18529	C	PRO	2777	27.520	16.922	1.435	1.00	33.57
ATOM	18530	O	PRO	2777	27.824	15.734	1.349	1.00	31.96
ATOM	18531	N	ASN	2778	28.288	17.902	0.966	1.00	33.97
ATOM	18532	CA	ASN	2778	29.555	17.625	0.296	1.00	35.27
ATOM	18533	CB	ASN	2778	29.619	18.366	-1.046	1.00	36.46
ATOM	18534	CG	ASN	2778	28.554	17.909	-2.023	1.00	38.38
ATOM	18535	OD1	ASN	2778	28.532	16.752	-2.435	1.00	38.91
ATOM	18536	ND2	ASN	2778	27.661	18.822	-2.399	1.00	39.92
ATOM	18537	C	ASN	2778	30.768	18.023	1.139	1.00	34.56
ATOM	18538	O	ASN	2778	31.884	18.090	0.629	1.00	35.51
ATOM	18539	N	CYS	2779	30.558	18.284	2.425	1.00	32.91
ATOM	18540	CA	CYS	2779	31.664	18.683	3.285	1.00	31.31
ATOM	18541	CB	CYS	2779	31.202	19.708	4.335	1.00	32.14
ATOM	18542	SG	CYS	2779	30.456	19.001	5.868	1.00	30.62
ATOM	18543	C	CYS	2779	32.287	17.497	4.006	1.00	31.79
ATOM	18544	O	CYS	2779	31.665	16.444	4.151	1.00	31.60
ATOM	18545	N	LEU	2780	33.531	17.673	4.436	1.00	30.11
ATOM	18546	CA	LEU	2780	34.231	16.647	5.191	1.00	29.59
ATOM	18547	CB	LEU	2780	35.744	16.787	5.018	1.00	29.72
ATOM	18548	CG	LEU	2780	36.593	15.754	5.768	1.00	29.00
ATOM	18549	CD1	LEU	2780	36.280	14.356	5.241	1.00	29.73
ATOM	18550	CD2	LEU	2780	38.070	16.064	5.591	1.00	30.17
ATOM	18551	C	LEU	2780	33.841	16.958	6.632	1.00	29.34
ATOM	18552	O	LEU	2780	34.395	17.868	7.245	1.00	28.84
ATOM	18553	N	LEU	2781	32.883	16.204	7.160	1.00	27.59
ATOM	18554	CA	LEU	2781	32.384	16.422	8.509	1.00	25.37
ATOM	18555	CB	LEU	2781	30.891	16.063	8.558	1.00	24.75
ATOM	18556	CG	LEU	2781	29.977	16.721	9.604	1.00	23.53
ATOM	18557	CD1	LEU	2781	28.525	16.303	9.359	1.00	23.06
ATOM	18558	CD2	LEU	2781	30.414	16.333	10.994	1.00	22.38
ATOM	18559	C	LEU	2781	33.149	15.643	9.584	1.00	25.37
ATOM	18560	O	LEU	2781	33.200	14.415	9.563	1.00	23.46
ATOM	18561	N	LEU	2782	33.758	16.372	10.514	1.00	26.91
ATOM	18562	CA	LEU	2782	34.488	15.760	11.617	1.00	26.65
ATOM	18563	CB	LEU	2782	35.891	16.349	11.738	1.00	29.44
ATOM	18564	CG	LEU	2782	36.940	15.866	10.736	1.00	31.77
ATOM	18565	CD1	LEU	2782	36.836	16.642	9.435	1.00	32.73
ATOM	18566	CD2	LEU	2782	38.316	16.046	11.354	1.00	34.44
ATOM	18567	C	LEU	2782	33.729	16.016	12.913	1.00	26.25
ATOM	18568	O	LEU	2782	33.362	17.152	13.208	1.00	26.93
ATOM	18569	N	ALA	2783	33.495	14.966	13.692	1.00	25.81
ATOM	18570	CA	ALA	2783	32.775	15.116	14.953	1.00	26.30
ATOM	18571	CB	ALA	2783	31.397	14.481	14.843	1.00	25.81
ATOM	18572	C	ALA	2783	33.555	14.483	16.096	1.00	23.83
ATOM	18573	O	ALA	2783	34.175	13.439	15.921	1.00	23.35
ATOM	18574	N	ASP	2784	33.532	15.112	17.267	1.00	24.55
ATOM	18575	CA	ASP	2784	34.258	14.565	18.409	1.00	24.44
ATOM	18576	CB	ASP	2784	34.644	15.649	19.420	1.00	29.43
ATOM	18577	CG	ASP	2784	35.301	16.852	18.787	1.00	30.77
ATOM	18578	OD1	ASP	2784	35.870	16.717	17.687	1.00	34.29
ATOM	18579	OD2	ASP	2784	35.253	17.929	19.416	1.00	32.28
ATOM	18580	C	ASP	2784	33.445	13.549	19.184	1.00	22.89
ATOM	18581	O	ASP	2784	32.213	13.581	19.176	1.00	22.27
ATOM	18582	N	LEU	2785	34.151	12.641	19.843	1.00	22.16
ATOM	18583	CA	LEU	2785	33.506	11.683	20.718	1.00	21.83
ATOM	18584	CB	LEU	2785	34.278	10.367	20.788	1.00	21.35
ATOM	18585	CG	LEU	2785	34.145	9.458	19.559	1.00	21.98

ATOM	18586	CD1	LEU	2785	34.687	8.077	19.896	1.00	22.46
ATOM	18587	CD2	LEU	2785	32.680	9.356	19.147	1.00	22.46
ATOM	18588	C	LEU	2785	33.629	12.440	22.032	1.00	23.06
ATOM	18589	O	LEU	2785	34.738	12.760	22.472	1.00	25.15
ATOM	18590	N	PRO	2786	32.495	12.771	22.658	1.00	22.63
ATOM	18591	CD	PRO	2786	31.134	12.348	22.285	1.00	22.73
ATOM	18592	CA	PRO	2786	32.483	13.509	23.925	1.00	22.23
ATOM	18593	CB	PRO	2786	30.993	13.690	24.200	1.00	22.61
ATOM	18594	CG	PRO	2786	30.400	12.444	23.604	1.00	24.03
ATOM	18595	C	PRO	2786	33.201	12.840	25.084	1.00	22.35
ATOM	18596	O	PRO	2786	33.774	11.761	24.945	1.00	23.47
ATOM	18597	N	PHE	2787	33.157	13.511	26.232	1.00	23.08
ATOM	18598	CA	PHE	2787	33.771	13.036	27.464	1.00	21.93
ATOM	18599	CB	PHE	2787	33.378	13.979	28.609	1.00	24.24
ATOM	18600	CG	PHE	2787	33.721	13.461	29.974	1.00	25.46
ATOM	18601	CD1	PHE	2787	35.047	13.282	30.355	1.00	28.52
ATOM	18602	CD2	PHE	2787	32.714	13.151	30.885	1.00	29.32
ATOM	18603	CE1	PHE	2787	35.368	12.802	31.624	1.00	29.53
ATOM	18604	CE2	PHE	2787	33.023	12.671	32.157	1.00	30.35
ATOM	18605	CZ	PHE	2787	34.356	12.496	32.529	1.00	31.34
ATOM	18606	C	PHE	2787	33.359	11.598	27.800	1.00	20.61
ATOM	18607	O	PHE	2787	32.174	11.260	27.788	1.00	21.01
ATOM	18608	N	MET	2788	34.354	10.766	28.091	1.00	17.86
ATOM	18609	CA	MET	2788	34.156	9.364	28.452	1.00	20.41
ATOM	18610	CB	MET	2788	33.417	9.269	29.793	1.00	21.52
ATOM	18611	CG	MET	2788	33.645	7.961	30.546	1.00	24.11
ATOM	18612	SD	MET	2788	35.397	7.699	30.917	1.00	25.02
ATOM	18613	CE	MET	2788	35.761	9.174	31.844	1.00	27.40
ATOM	18614	C	MET	2788	33.405	8.555	27.396	1.00	19.70
ATOM	18615	O	MET	2788	32.811	7.516	27.705	1.00	22.61
ATOM	18616	N	ALA	2789	33.430	9.020	26.152	1.00	19.87
ATOM	18617	CA	ALA	2789	32.736	8.321	25.069	1.00	18.87
ATOM	18618	CB	ALA	2789	32.236	9.326	24.036	1.00	19.03
ATOM	18619	C	ALA	2789	33.627	7.287	24.400	1.00	19.61
ATOM	18620	O	ALA	2789	33.190	6.566	23.502	1.00	18.35
ATOM	18621	N	TYR	2790	34.880	7.213	24.832	1.00	19.23
ATOM	18622	CA	TYR	2790	35.813	6.250	24.257	1.00	20.39
ATOM	18623	CB	TYR	2790	36.632	6.911	23.146	1.00	21.61
ATOM	18624	CG	TYR	2790	37.208	8.255	23.518	1.00	21.98
ATOM	18625	CD1	TYR	2790	38.509	8.373	24.012	1.00	24.51
ATOM	18626	CE1	TYR	2790	39.039	9.625	24.362	1.00	26.09
ATOM	18627	CD2	TYR	2790	36.445	9.413	23.385	1.00	22.55
ATOM	18628	CE2	TYR	2790	36.958	10.661	23.731	1.00	25.20
ATOM	18629	CZ	TYR	2790	38.252	10.760	24.216	1.00	26.07
ATOM	18630	OH	TYR	2790	38.752	12.006	24.538	1.00	28.26
ATOM	18631	C	TYR	2790	36.720	5.685	25.331	1.00	21.20
ATOM	18632	O	TYR	2790	37.905	5.452	25.099	1.00	20.79
ATOM	18633	N	ALA	2791	36.136	5.443	26.501	1.00	20.62
ATOM	18634	CA	ALA	2791	36.863	4.902	27.649	1.00	22.09
ATOM	18635	CB	ALA	2791	35.957	4.894	28.876	1.00	23.98
ATOM	18636	C	ALA	2791	37.401	3.496	27.383	1.00	21.97
ATOM	18637	O	ALA	2791	38.381	3.075	27.994	1.00	22.52
ATOM	18638	N	THR	2792	36.740	2.766	26.491	1.00	20.00
ATOM	18639	CA	THR	2792	37.186	1.431	26.123	1.00	20.70
ATOM	18640	CB	THR	2792	36.348	0.313	26.786	1.00	21.59
ATOM	18641	OG1	THR	2792	35.030	0.310	26.220	1.00	23.40
ATOM	18642	CG2	THR	2792	36.250	0.532	28.297	1.00	20.98
ATOM	18643	C	THR	2792	36.999	1.325	24.616	1.00	21.35
ATOM	18644	O	THR	2792	36.128	1.980	24.052	1.00	19.07
ATOM	18645	N	PRO	2793	37.824	0.510	23.945	1.00	21.50
ATOM	18646	CD	PRO	2793	38.961	-0.267	24.471	1.00	22.59
ATOM	18647	CA	PRO	2793	37.711	0.348	22.494	1.00	22.71
ATOM	18648	CB	PRO	2793	38.738	-0.737	22.197	1.00	23.86
ATOM	18649	CG	PRO	2793	39.806	-0.458	23.233	1.00	24.23
ATOM	18650	C	PRO	2793	36.290	-0.051	22.097	1.00	21.79
ATOM	18651	O	PRO	2793	35.740	0.462	21.124	1.00	20.91
ATOM	18652	N	GLU	2794	35.694	-0.954	22.867	1.00	22.08
ATOM	18653	CA	GLU	2794	34.341	-1.412	22.588	1.00	22.74
ATOM	18654	CB	GLU	2794	33.932	-2.482	23.603	1.00	26.70
ATOM	18655	CG	GLU	2794	32.778	-3.362	23.157	1.00	32.07
ATOM	18656	CD	GLU	2794	32.483	-4.484	24.143	1.00	37.26
ATOM	18657	OE1	GLU	2794	32.076	-4.182	25.291	1.00	38.96
ATOM	18658	OE2	GLU	2794	32.659	-5.669	23.771	1.00	39.39
ATOM	18659	C	GLU	2794	33.367	-0.231	22.628	1.00	21.49
ATOM	18660	O	GLU	2794	32.536	-0.073	21.734	1.00	18.66
ATOM	18661	N	GLN	2795	33.465	0.609	23.652	1.00	19.76
ATOM	18662	CA	GLN	2795	32.574	1.758	23.728	1.00	19.97

ATOM	18663	CB	GLN	2795	32.708	2.444	25.086	1.00	23.38
ATOM	18664	CG	GLN	2795	32.276	1.563	26.239	1.00	30.06
ATOM	18665	CD	GLN	2795	32.302	2.296	27.555	1.00	33.76
ATOM	18666	OE1	GLN	2795	31.557	3.257	27.755	1.00	37.23
ATOM	18667	NE2	GLN	2795	33.164	1.854	28.463	1.00	37.36
ATOM	18668	C	GLN	2795	32.883	2.738	22.602	1.00	18.75
ATOM	18669	O	GLN	2795	31.979	3.379	22.055	1.00	16.21
ATOM	18670	N	ALA	2796	34.160	2.853	22.251	1.00	17.68
ATOM	18671	CA	ALA	2796	34.561	3.740	21.161	1.00	16.76
ATOM	18672	CB	ALA	2796	36.077	3.731	21.019	1.00	17.78
ATOM	18673	C	ALA	2796	33.909	3.306	19.844	1.00	15.71
ATOM	18674	O	ALA	2796	33.408	4.146	19.097	1.00	13.16
ATOM	18675	N	PHE	2797	33.897	2.002	19.567	1.00	16.19
ATOM	18676	CA	PHE	2797	33.302	1.508	18.319	1.00	16.66
ATOM	18677	CB	PHE	2797	33.374	-0.023	18.233	1.00	15.73
ATOM	18678	CG	PHE	2797	34.749	-0.596	18.450	1.00	19.24
ATOM	18679	CD1	PHE	2797	35.882	0.081	18.013	1.00	17.94
ATOM	18680	CD2	PHE	2797	34.907	-1.823	19.088	1.00	17.33
ATOM	18681	CE1	PHE	2797	37.153	-0.453	18.212	1.00	20.94
ATOM	18682	CE2	PHE	2797	36.175	-2.369	19.293	1.00	20.14
ATOM	18683	CZ	PHE	2797	37.299	-1.678	18.853	1.00	18.91
ATOM	18684	C	PHE	2797	31.840	1.925	18.221	1.00	15.33
ATOM	18685	O	PHE	2797	31.398	2.438	17.197	1.00	14.05
ATOM	18686	N	GLU	2798	31.105	1.688	19.305	1.00	17.31
ATOM	18687	CA	GLU	2798	29.687	2.015	19.392	1.00	18.59
ATOM	18688	CB	GLU	2798	29.139	1.537	20.741	1.00	23.40
ATOM	18689	CG	GLU	2798	27.645	1.743	20.953	1.00	27.48
ATOM	18690	CD	GLU	2798	26.801	0.925	19.996	1.00	31.32
ATOM	18691	OE1	GLU	2798	27.266	-0.155	19.566	1.00	34.20
ATOM	18692	OE2	GLU	2798	25.667	1.353	19.685	1.00	34.45
ATOM	18693	C	GLU	2798	29.379	3.507	19.220	1.00	17.82
ATOM	18694	O	GLU	2798	28.510	3.882	18.432	1.00	16.21
ATOM	18695	N	ASN	2799	30.082	4.363	19.956	1.00	17.26
ATOM	18696	CA	ASN	2799	29.808	5.790	19.863	1.00	16.33
ATOM	18697	CB	ASN	2799	30.402	6.521	21.069	1.00	17.15
ATOM	18698	CG	ASN	2799	29.710	6.125	22.369	1.00	20.67
ATOM	18699	OD1	ASN	2799	28.495	5.923	22.388	1.00	17.99
ATOM	18700	ND2	ASN	2799	30.474	6.017	23.455	1.00	17.98
ATOM	18701	C	ASN	2799	30.267	6.411	18.553	1.00	15.61
ATOM	18702	O	ASN	2799	29.615	7.313	18.031	1.00	15.62
ATOM	18703	N	ALA	2800	31.379	5.915	18.019	1.00	16.20
ATOM	18704	CA	ALA	2800	31.891	6.395	16.748	1.00	16.55
ATOM	18705	CB	ALA	2800	33.233	5.752	16.443	1.00	14.64
ATOM	18706	C	ALA	2800	30.885	6.050	15.653	1.00	16.73
ATOM	18707	O	ALA	2800	30.570	6.877	14.792	1.00	17.09
ATOM	18708	N	ALA	2801	30.375	4.825	15.678	1.00	16.50
ATOM	18709	CA	ALA	2801	29.413	4.412	14.663	1.00	16.96
ATOM	18710	CB	ALA	2801	29.023	2.953	14.865	1.00	17.94
ATOM	18711	C	ALA	2801	28.180	5.306	14.726	1.00	15.19
ATOM	18712	O	ALA	2801	27.618	5.662	13.696	1.00	17.52
ATOM	18713	N	THR	2802	27.765	5.679	15.934	1.00	16.31
ATOM	18714	CA	THR	2802	26.596	6.528	16.082	1.00	15.68
ATOM	18715	CB	THR	2802	26.265	6.808	17.572	1.00	16.35
ATOM	18716	OG1	THR	2802	25.995	5.577	18.252	1.00	14.35
ATOM	18717	CG2	THR	2802	25.041	7.713	17.681	1.00	14.96
ATOM	18718	C	THR	2802	26.778	7.869	15.369	1.00	16.13
ATOM	18719	O	THR	2802	25.895	8.318	14.636	1.00	17.22
ATOM	18720	N	VAL	2803	27.921	8.509	15.580	1.00	16.63
ATOM	18721	CA	VAL	2803	28.186	9.798	14.956	1.00	17.54
ATOM	18722	CB	VAL	2803	29.380	10.502	15.644	1.00	18.75
ATOM	18723	CG1	VAL	2803	29.719	11.786	14.915	1.00	23.96
ATOM	18724	CG2	VAL	2803	29.023	10.813	17.098	1.00	20.56
ATOM	18725	C	VAL	2803	28.449	9.669	13.458	1.00	16.45
ATOM	18726	O	VAL	2803	28.126	10.574	12.684	1.00	18.21
ATOM	18727	N	MET	2804	29.029	8.547	13.051	1.00	16.81
ATOM	18728	CA	MET	2804	29.303	8.304	11.639	1.00	17.14
ATOM	18729	CB	MET	2804	30.229	7.093	11.480	1.00	18.19
ATOM	18730	CG	MET	2804	31.654	7.295	11.995	1.00	22.52
ATOM	18731	SD	MET	2804	32.594	8.461	10.990	1.00	24.27
ATOM	18732	CE	MET	2804	32.659	7.556	9.422	1.00	20.51
ATOM	18733	C	MET	2804	27.984	8.063	10.903	1.00	16.01
ATOM	18734	O	MET	2804	27.761	8.618	9.824	1.00	15.88
ATOM	18735	N	ARG	2805	27.101	7.248	11.481	1.00	15.73
ATOM	18736	CA	ARG	2805	25.822	6.986	10.831	1.00	15.34
ATOM	18737	CB	ARG	2805	25.011	5.925	11.596	1.00	13.01
ATOM	18738	CG	ARG	2805	25.647	4.539	11.632	1.00	16.75
ATOM	18739	CD	ARG	2805	24.645	3.460	12.060	1.00	13.35

ATOM	18740	NE	ARG	2805	25.314	2.212	12.432	1.00	18.35
ATOM	18741	CZ	ARG	2805	25.762	1.941	13.652	1.00	16.28
ATOM	18742	NH1	ARG	2805	25.609	2.829	14.630	1.00	18.45
ATOM	18743	NH2	ARG	2805	26.369	0.789	13.894	1.00	17.59
ATOM	18744	C	ARG	2805	24.999	8.268	10.718	1.00	15.55
ATOM	18745	O	ARG	2805	24.179	8.404	9.817	1.00	14.99
ATOM	18746	N	ALA	2806	25.232	9.207	11.633	1.00	16.80
ATOM	18747	CA	ALA	2806	24.502	10.473	11.639	1.00	16.91
ATOM	18748	CB	ALA	2806	24.548	11.095	13.030	1.00	16.95
ATOM	18749	C	ALA	2806	24.997	11.483	10.602	1.00	18.90
ATOM	18750	O	ALA	2806	24.425	12.567	10.466	1.00	16.85
ATOM	18751	N	GLY	2807	26.062	11.144	9.880	1.00	17.86
ATOM	18752	CA	GLY	2807	26.555	12.055	8.862	1.00	20.83
ATOM	18753	C	GLY	2807	28.042	12.344	8.866	1.00	19.96
ATOM	18754	O	GLY	2807	28.583	12.841	7.873	1.00	20.33
ATOM	18755	N	ALA	2808	28.706	12.039	9.976	1.00	20.84
ATOM	18756	CA	ALA	2808	30.141	12.279	10.094	1.00	20.51
ATOM	18757	CB	ALA	2808	30.596	12.030	11.532	1.00	21.43
ATOM	18758	C	ALA	2808	30.983	11.433	9.140	1.00	22.32
ATOM	18759	O	ALA	2808	30.583	10.340	8.734	1.00	22.72
ATOM	18760	N	ASN	2809	32.154	11.954	8.783	1.00	21.83
ATOM	18761	CA	ASN	2809	33.076	11.252	7.895	1.00	23.00
ATOM	18762	CB	ASN	2809	33.563	12.161	6.756	1.00	23.04
ATOM	18763	CG	ASN	2809	32.454	12.563	5.813	1.00	22.97
ATOM	18764	OD1	ASN	2809	31.720	11.715	5.303	1.00	26.20
ATOM	18765	ND2	ASN	2809	32.329	13.856	5.567	1.00	24.82
ATOM	18766	C	ASN	2809	34.281	10.828	8.713	1.00	23.50
ATOM	18767	O	ASN	2809	34.991	9.885	8.365	1.00	22.98
ATOM	18768	N	MET	2810	34.503	11.531	9.815	1.00	23.62
ATOM	18769	CA	MET	2810	35.642	11.247	10.669	1.00	23.93
ATOM	18770	CB	MET	2810	36.853	12.052	10.181	1.00	25.09
ATOM	18771	CG	MET	2810	38.126	11.879	10.995	1.00	24.78
ATOM	18772	SD	MET	2810	39.481	12.847	10.255	1.00	28.00
ATOM	18773	CE	MET	2810	40.353	11.582	9.303	1.00	27.11
ATOM	18774	C	MET	2810	35.318	11.602	12.112	1.00	22.92
ATOM	18775	O	MET	2810	34.490	12.469	12.377	1.00	22.76
ATOM	18776	N	VAL	2811	35.972	10.912	13.037	1.00	21.54
ATOM	18777	CA	VAL	2811	35.767	11.144	14.452	1.00	22.27
ATOM	18778	CB	VAL	2811	35.345	9.840	15.156	1.00	22.64
ATOM	18779	CG1	VAL	2811	35.310	10.042	16.639	1.00	27.23
ATOM	18780	CG2	VAL	2811	33.972	9.399	14.652	1.00	23.31
ATOM	18781	C	VAL	2811	37.052	11.665	15.092	1.00	21.34
ATOM	18782	O	VAL	2811	38.151	11.238	14.729	1.00	20.30
ATOM	18783	N	LYS	2812	36.912	12.593	16.037	1.00	21.70
ATOM	18784	CA	LYS	2812	38.066	13.153	16.737	1.00	21.55
ATOM	18785	CB	LYS	2812	38.114	14.679	16.577	1.00	20.79
ATOM	18786	CG	LYS	2812	39.283	15.330	17.324	1.00	22.48
ATOM	18787	CD	LYS	2812	39.567	16.749	16.830	1.00	21.07
ATOM	18788	CE	LYS	2812	38.508	17.730	17.295	1.00	21.59
ATOM	18789	NZ	LYS	2812	38.526	17.887	18.777	1.00	19.95
ATOM	18790	C	LYS	2812	38.027	12.803	18.216	1.00	21.09
ATOM	18791	O	LYS	2812	37.000	12.967	18.873	1.00	20.83
ATOM	18792	N	ILE	2813	39.151	12.311	18.729	1.00	23.63
ATOM	18793	CA	ILE	2813	39.271	11.941	20.138	1.00	25.12
ATOM	18794	CB	ILE	2813	39.341	10.403	20.318	1.00	26.14
ATOM	18795	CG2	ILE	2813	38.018	9.763	19.878	1.00	25.11
ATOM	18796	CG1	ILE	2813	40.495	9.829	19.499	1.00	27.05
ATOM	18797	CD1	ILE	2813	40.733	8.341	19.742	1.00	28.78
ATOM	18798	C	ILE	2813	40.542	12.560	20.735	1.00	27.72
ATOM	18799	O	ILE	2813	41.580	12.607	20.078	1.00	26.81
ATOM	18800	N	GLU	2814	40.454	13.028	21.978	1.00	29.43
ATOM	18801	CA	GLU	2814	41.591	13.651	22.650	1.00	32.04
ATOM	18802	CB	GLU	2814	41.106	14.813	23.522	1.00	34.21
ATOM	18803	CG	GLU	2814	40.144	15.750	22.806	1.00	39.30
ATOM	18804	CD	GLU	2814	39.764	16.966	23.636	1.00	41.47
ATOM	18805	OE1	GLU	2814	39.370	16.798	24.812	1.00	41.55
ATOM	18806	OE2	GLU	2814	39.852	18.093	23.105	-1.00	44.11
ATOM	18807	C	GLU	2814	42.364	12.655	23.509	1.00	31.92
ATOM	18808	O	GLU	2814	41.779	11.914	24.296	1.00	33.22
ATOM	18809	N	GLY	2815	43.684	12.641	23.354	1.00	30.77
ATOM	18810	CA	GLY	2815	44.506	11.729	24.126	1.00	30.34
ATOM	18811	C	GLY	2815	45.801	11.392	23.415	1.00	31.29
ATOM	18812	O	GLY	2815	45.975	11.705	22.234	1.00	30.87
ATOM	18813	N	GLY	2816	46.715	10.748	24.134	1.00	31.99
ATOM	18814	CA	GLY	2816	47.992	10.387	23.547	1.00	33.07
ATOM	18815	C	GLY	2816	48.172	8.903	23.294	1.00	34.28
ATOM	18816	O	GLY	2816	47.325	8.261	22.675	1.00	34.33

ATOM	18817	N	GLU	2817	49.285	8.364	23.783	1.00	34.03
ATOM	18818	CA	GLU	2817	49.631	6.956	23.615	1.00	34.66
ATOM	18819	CB	GLU	2817	50.925	6.647	24.376	1.00	37.31
ATOM	18820	CG	GLU	2817	52.196	7.025	23.634	1.00	40.46
ATOM	18821	CD	GLU	2817	52.586	5.990	22.591	1.00	42.88
ATOM	18822	OE1	GLU	2817	51.711	5.590	21.793	1.00	44.37
ATOM	18823	OE2	GLU	2817	53.767	5.582	22.567	1.00	42.78
ATOM	18824	C	GLU	2817	48.569	5.946	24.032	1.00	33.69
ATOM	18825	O	GLU	2817	48.395	4.923	23.369	1.00	34.29
ATOM	18826	N	TRP	2818	47.866	6.220	25.127	1.00	32.46
ATOM	18827	CA	TRP	2818	46.855	5.290	25.613	1.00	30.43
ATOM	18828	CB	TRP	2818	46.254	5.779	26.942	1.00	30.40
ATOM	18829	CG	TRP	2818	45.293	6.930	26.822	1.00	29.06
ATOM	18830	CD2	TRP	2818	43.862	6.850	26.831	1.00	28.87
ATOM	18831	CE2	TRP	2818	43.367	8.166	26.698	1.00	28.69
ATOM	18832	CE3	TRP	2818	42.950	5.791	26.941	1.00	27.56
ATOM	18833	CD1	TRP	2818	45.601	8.252	26.684	1.00	30.79
ATOM	18834	NE1	TRP	2818	44.448	9.005	26.609	1.00	30.25
ATOM	18835	CZ2	TRP	2818	41.997	8.451	26.667	1.00	27.27
ATOM	18836	CZ3	TRP	2818	41.590	6.074	26.910	1.00	27.33
ATOM	18837	CH2	TRP	2818	41.127	7.399	26.776	1.00	27.02
ATOM	18838	C	TRP	2818	45.737	5.048	24.604	1.00	28.89
ATOM	18839	O	TRP	2818	44.964	4.105	24.741	1.00	30.31
ATOM	18840	N	LEU	2819	45.656	5.892	23.585	1.00	27.35
ATOM	18841	CA	LEU	2819	44.616	5.744	22.579	1.00	26.42
ATOM	18842	CB	LEU	2819	44.132	7.118	22.115	1.00	26.77
ATOM	18843	CG	LEU	2819	43.245	7.896	23.085	1.00	28.13
ATOM	18844	CD1	LEU	2819	42.926	9.257	22.487	1.00	29.42
ATOM	18845	CD2	LEU	2819	41.969	7.121	23.358	1.00	29.42
ATOM	18846	C	LEU	2819	45.040	4.930	21.364	1.00	25.13
ATOM	18847	O	LEU	2819	44.218	4.647	20.497	1.00	21.39
ATOM	18848	N	VAL	2820	46.315	4.550	21.297	1.00	24.43
ATOM	18849	CA	VAL	2820	46.814	3.783	20.155	1.00	26.56
ATOM	18850	CB	VAL	2820	48.258	3.281	20.395	1.00	26.68
ATOM	18851	CG1	VAL	2820	48.671	2.330	19.282	1.00	27.02
ATOM	18852	CG2	VAL	2820	49.210	4.461	20.446	1.00	28.43
ATOM	18853	C	VAL	2820	45.942	2.587	19.774	1.00	25.78
ATOM	18854	O	VAL	2820	45.503	2.471	18.631	1.00	27.60
ATOM	18855	N	GLU	2821	45.704	1.696	20.729	1.00	24.73
ATOM	18856	CA	GLU	2821	44.895	0.514	20.477	1.00	25.30
ATOM	18857	CB	GLU	2821	44.782	-0.321	21.755	1.00	28.80
ATOM	18858	CG	GLU	2821	44.051	-1.643	21.574	1.00	32.13
ATOM	18859	CD	GLU	2821	43.926	-2.416	22.870	1.00	35.13
ATOM	18860	OE1	GLU	2821	43.340	-1.871	23.830	1.00	36.98
ATOM	18861	OE2	GLU	2821	44.410	-3.566	22.927	1.00	36.11
ATOM	18862	C	GLU	2821	43.501	0.876	19.962	1.00	24.62
ATOM	18863	O	GLU	2821	42.979	0.236	19.046	1.00	21.97
ATOM	18864	N	THR	2822	42.900	1.905	20.549	1.00	24.29
ATOM	18865	CA	THR	2822	41.568	2.336	20.141	1.00	23.99
ATOM	18866	CB	THR	2822	41.021	3.415	21.099	1.00	24.68
ATOM	18867	OG1	THR	2822	40.929	2.868	22.422	1.00	24.15
ATOM	18868	CG2	THR	2822	39.635	3.882	20.652	1.00	23.04
ATOM	18869	C	THR	2822	41.590	2.876	18.715	1.00	24.63
ATOM	18870	O	THR	2822	40.671	2.631	17.927	1.00	21.47
ATOM	18871	N	VAL	2823	42.645	3.611	18.381	1.00	23.83
ATOM	18872	CA	VAL	2823	42.785	4.170	17.041	1.00	23.79
ATOM	18873	CB	VAL	2823	44.002	5.116	16.961	1.00	25.30
ATOM	18874	CG1	VAL	2823	44.159	5.638	15.535	1.00	25.93
ATOM	18875	CG2	VAL	2823	43.816	6.276	17.928	1.00	25.50
ATOM	18876	C	VAL	2823	42.948	3.063	16.005	1.00	23.15
ATOM	18877	O	VAL	2823	42.275	3.063	14.974	1.00	21.77
ATOM	18878	N	GLN	2824	43.839	2.117	16.296	1.00	24.00
ATOM	18879	CA	GLN	2824	44.106	1.000	15.395	1.00	24.92
ATOM	18880	CB	GLN	2824	45.156	0.068	16.005	1.00	27.02
ATOM	18881	CG	GLN	2824	46.476	0.737	16.333	1.00	33.50
ATOM	18882	CD	GLN	2824	47.494	-0.229	16.908	1.00	35.79
ATOM	18883	OE1	GLN	2824	47.242	-0.891	17.917	1.00	38.12
ATOM	18884	NE2	GLN	2824	48.656	-0.312	16.267	1.00	38.24
ATOM	18885	C	GLN	2824	42.840	0.207	15.101	1.00	23.85
ATOM	18886	O	GLN	2824	42.518	-0.057	13.946	1.00	25.38
ATOM	18887	N	MET	2825	42.126	-0.167	16.155	1.00	23.02
ATOM	18888	CA	MET	2825	40.905	-0.946	16.010	1.00	22.80
ATOM	18889	CB	MET	2825	40.438	-1.426	17.385	1.00	23.09
ATOM	18890	CG	MET	2825	41.414	-2.396	18.028	1.00	24.85
ATOM	18891	SD	MET	2825	40.854	-3.051	19.588	1.00	26.27
ATOM	18892	CE	MET	2825	39.744	-4.323	19.026	1.00	27.47
ATOM	18893	C	MET	2825	39.786	-0.196	15.298	1.00	20.09

ATOM	18894	O	MET	2825	39.024	-0.793	14.543	1.00	19.10
ATOM	18895	N	LEU	2826	39.685	1.109	15.537	1.00	20.85
ATOM	18896	CA	LEU	2826	38.655	1.915	14.893	1.00	22.61
ATOM	18897	CB	LEU	2826	38.620	3.325	15.488	1.00	20.71
ATOM	18898	CG	LEU	2826	37.867	3.457	16.819	1.00	23.07
ATOM	18899	CD1	LEU	2826	38.183	4.783	17.487	1.00	21.86
ATOM	18900	CD2	LEU	2826	36.373	3.333	16.548	1.00	21.56
ATOM	18901	C	LEU	2826	38.883	1.998	13.385	1.00	24.44
ATOM	18902	O	LEU	2826	37.944	1.870	12.597	1.00	22.55
ATOM	18903	N	THR	2827	40.135	2.204	12.990	1.00	26.28
ATOM	18904	CA	THR	2827	40.474	2.301	11.578	1.00	29.53
ATOM	18905	CB	THR	2827	41.988	2.511	11.384	1.00	30.21
ATOM	18906	OG1	THR	2827	42.382	3.734	12.020	1.00	34.27
ATOM	18907	CG2	THR	2827	42.327	2.588	9.901	1.00	33.86
ATOM	18908	C	THR	2827	40.034	1.060	10.795	1.00	27.89
ATOM	18909	O	THR	2827	39.349	1.173	9.779	1.00	28.82
ATOM	18910	N	GLU	2828	40.416	-0.121	11.268	1.00	28.30
ATOM	18911	CA	GLU	2828	40.041	-1.350	10.580	1.00	28.55
ATOM	18912	CB	GLU	2828	40.775	-2.548	11.179	1.00	30.32
ATOM	18913	CG	GLU	2828	41.107	-2.404	12.638	1.00	31.98
ATOM	18914	CD	GLU	2828	41.836	-3.614	13.180	1.00	32.11
ATOM	18915	OE1	GLU	2828	42.836	-4.041	12.564	1.00	32.16
ATOM	18916	OE2	GLU	2828	41.415	-4.134	14.235	1.00	30.79
ATOM	18917	C	GLU	2828	38.540	-1.588	10.592	1.00	27.06
ATOM	18918	O	GLU	2828	38.030	-2.412	9.831	1.00	27.55
ATOM	18919	N	ARG	2829	37.829	-0.857	11.444	1.00	23.40
ATOM	18920	CA	ARG	2829	36.384	-0.997	11.513	1.00	22.00
ATOM	18921	CB	ARG	2829	35.931	-1.037	12.973	1.00	20.32
ATOM	18922	CG	ARG	2829	36.241	-2.378	13.629	1.00	19.39
ATOM	18923	CD	ARG	2829	36.285	-2.294	15.140	1.00	18.70
ATOM	18924	NE	ARG	2829	36.650	-3.585	15.719	1.00	16.89
ATOM	18925	CZ	ARG	2829	37.869	-4.112	15.666	1.00	17.72
ATOM	18926	NH1	ARG	2829	38.856	-3.459	15.065	1.00	16.97
ATOM	18927	NH2	ARG	2829	38.102	-5.303	16.201	1.00	21.33
ATOM	18928	C	ARG	2829	35.674	0.104	10.739	1.00	20.80
ATOM	18929	O	ARG	2829	34.536	0.458	11.040	1.00	19.63
ATOM	18930	N	ALA	2830	36.368	0.642	9.737	1.00	21.90
ATOM	18931	CA	ALA	2830	35.825	1.680	8.856	1.00	21.97
ATOM	18932	CB	ALA	2830	34.474	1.223	8.305	1.00	22.04
ATOM	18933	C	ALA	2830	35.690	3.086	9.435	1.00	22.69
ATOM	18934	O	ALA	2830	35.042	3.937	8.828	1.00	22.61
ATOM	18935	N	VAL	2831	36.297	3.341	10.589	1.00	22.14
ATOM	18936	CA	VAL	2831	36.194	4.662	11.194	1.00	22.55
ATOM	18937	CB	VAL	2831	35.679	4.570	12.651	1.00	23.25
ATOM	18938	CG1	VAL	2831	35.612	5.957	13.264	1.00	22.11
ATOM	18939	CG2	VAL	2831	34.300	3.910	12.684	1.00	21.29
ATOM	18940	C	VAL	2831	37.520	5.427	11.207	1.00	22.41
ATOM	18941	O	VAL	2831	38.439	5.071	11.940	1.00	21.58
ATOM	18942	N	PRO	2832	37.634	6.490	10.389	1.00	22.74
ATOM	18943	CD	PRO	2832	36.681	6.962	9.370	1.00	23.21
ATOM	18944	CA	PRO	2832	38.870	7.279	10.350	1.00	23.36
ATOM	18945	CB	PRO	2832	38.710	8.110	9.081	1.00	24.93
ATOM	18946	CG	PRO	2832	37.244	8.323	9.011	1.00	26.31
ATOM	18947	C	PRO	2832	38.961	8.129	11.611	1.00	23.38
ATOM	18948	O	PRO	2832	37.954	8.644	12.093	1.00	20.50
ATOM	18949	N	VAL	2833	40.169	8.274	12.143	1.00	23.46
ATOM	18950	CA	VAL	2833	40.352	9.035	13.368	1.00	24.56
ATOM	18951	CB	VAL	2833	40.985	8.147	14.466	1.00	25.29
ATOM	18952	CG1	VAL	2833	41.061	8.909	15.778	1.00	26.10
ATOM	18953	CG2	VAL	2833	40.167	6.869	14.638	1.00	26.15
ATOM	18954	C	VAL	2833	41.206	10.284	13.203	1.00	26.06
ATOM	18955	O	VAL	2833	42.156	10.307	12.420	1.00	22.96
ATOM	18956	N	CYS	2834	40.842	11.325	13.943	1.00	26.64
ATOM	18957	CA	CYS	2834	41.580	12.583	13.943	1.00	27.09
ATOM	18958	CB	CYS	2834	40.683	13.755	13.553	1.00	27.30
ATOM	18959	SG	CYS	2834	41.516	15.369	13.665	1.00	27.45
ATOM	18960	C	CYS	2834	42.098	12.794	15.358	1.00	28.85
ATOM	18961	O	CYS	2834	41.316	12.957	16.297	1.00	28.83
ATOM	18962	N	GLY	2835	43.418	12.776	15.508	1.00	29.22
ATOM	18963	CA	GLY	2835	44.014	12.970	16.816	1.00	29.92
ATOM	18964	C	GLY	2835	43.832	14.382	17.336	1.00	30.47
ATOM	18965	O	GLY	2835	43.460	15.288	16.590	1.00	28.61
ATOM	18966	N	HIS	2836	44.100	14.561	18.624	1.00	31.84
ATOM	18967	CA	HIS	2836	43.971	15.860	19.274	1.00	35.35
ATOM	18968	CB	HIS	2836	42.553	16.033	19.816	1.00	36.73
ATOM	18969	CG	HIS	2836	42.276	17.396	20.366	1.00	38.60
ATOM	18970	CD2	HIS	2836	42.821	18.067	21.409	1.00	39.81

ATOM	18971	ND1	HIS	2836	41.313	18.226	19.837	1.00	39.91
ATOM	18972	CE1	HIS	2836	41.274	19.350	20.531	1.00	41.13
ATOM	18973	NE2	HIS	2836	42.180	19.278	21.490	1.00	41.39
ATOM	18974	C	HIS	2836	44.973	15.941	20.420	1.00	36.62
ATOM	18975	O	HIS	2836	44.800	15.291	21.452	1.00	34.99
ATOM	18976	N	LEU	2837	46.018	16.742	20.231	1.00	38.21
ATOM	18977	CA	LEU	2837	47.059	16.905	21.239	1.00	41.31
ATOM	18978	CB	LEU	2837	48.365	16.279	20.745	1.00	40.92
ATOM	18979	CG	LEU	2837	48.343	14.765	20.510	1.00	40.97
ATOM	18980	CD1	LEU	2837	49.609	14.330	19.794	1.00	41.01
ATOM	18981	CD2	LEU	2837	48.201	14.051	21.840	1.00	41.35
ATOM	18982	C	LEU	2837	47.285	18.377	21.557	1.00	43.49
ATOM	18983	O	LEU	2837	46.981	19.249	20.745	1.00	43.31
ATOM	18984	N	GLY	2838	47.820	18.647	22.743	1.00	46.60
ATOM	18985	CA	GLY	2838	48.077	20.018	23.141	1.00	50.65
ATOM	18986	C	GLY	2838	47.359	20.378	24.425	1.00	53.60
ATOM	18987	O	GLY	2838	47.800	20.013	25.514	1.00	54.57
ATOM	18988	N	LEU	2839	46.246	21.092	24.297	1.00	56.02
ATOM	18989	CA	LEU	2839	45.466	21.503	25.457	1.00	58.56
ATOM	18990	CB	LEU	2839	45.363	23.032	25.490	1.00	58.83
ATOM	18991	CG	LEU	2839	45.049	23.710	26.827	1.00	59.71
ATOM	18992	CD1	LEU	2839	45.256	25.209	26.685	1.00	60.17
ATOM	18993	CD2	LEU	2839	43.631	23.394	27.263	1.00	59.46
ATOM	18994	C	LEU	2839	44.074	20.875	25.377	1.00	60.00
ATOM	18995	O	LEU	2839	43.142	21.473	24.843	1.00	60.93
ATOM	18996	N	THR	2840	43.944	19.663	25.910	1.00	61.24
ATOM	18997	CA	THR	2840	42.672	18.946	25.892	1.00	62.45
ATOM	18998	CB	THR	2840	42.879	17.438	26.157	1.00	62.30
ATOM	18999	OG1	THR	2840	43.477	17.254	27.446	1.00	62.47
ATOM	19000	CG2	THR	2840	43.782	16.831	25.094	1.00	62.36
ATOM	19001	C	THR	2840	41.688	19.493	26.925	1.00	63.01
ATOM	19002	O	THR	2840	41.915	19.383	28.131	1.00	63.56
ATOM	19003	N	PRO	2841	40.577	20.090	26.460	1.00	63.41
ATOM	19004	CD	PRO	2841	40.230	20.321	25.046	1.00	63.65
ATOM	19005	CA	PRO	2841	39.553	20.658	27.343	1.00	63.37
ATOM	19006	CB	PRO	2841	38.678	21.457	26.380	1.00	63.72
ATOM	19007	CG	PRO	2841	38.754	20.648	25.127	1.00	64.24
ATOM	19008	C	PRO	2841	38.756	19.614	28.127	1.00	62.86
ATOM	19009	O	PRO	2841	38.222	19.911	29.196	1.00	62.53
ATOM	19010	N	GLN	2842	38.676	18.397	27.594	1.00	62.50
ATOM	19011	CA	GLN	2842	37.945	17.320	28.258	1.00	62.12
ATOM	19012	CB	GLN	2842	37.873	16.081	27.359	1.00	62.10
ATOM	19013	CG	GLN	2842	36.798	16.147	26.282	1.00	61.81
ATOM	19014	CD	GLN	2842	36.712	14.871	25.465	1.00	61.57
ATOM	19015	OE1	GLN	2842	36.650	13.772	26.016	1.00	61.29
ATOM	19016	NE2	GLN	2842	36.698	15.012	24.145	1.00	61.54
ATOM	19017	C	GLN	2842	38.583	16.942	29.591	1.00	61.81
ATOM	19018	O	GLN	2842	37.955	16.293	30.429	1.00	61.09
ATOM	19019	N	SER	2843	39.833	17.352	29.781	1.00	61.46
ATOM	19020	CA	SER	2843	40.557	17.060	31.012	1.00	61.52
ATOM	19021	CB	SER	2843	41.890	16.381	30.689	1.00	61.26
ATOM	19022	OG	SER	2843	41.690	15.191	29.947	1.00	61.14
ATOM	19023	C	SER	2843	40.810	18.342	31.798	1.00	61.57
ATOM	19024	O	SER	2843	41.905	18.555	32.320	1.00	62.21
ATOM	19025	N	VAL	2844	39.790	19.191	31.879	1.00	61.40
ATOM	19026	CA	VAL	2844	39.894	20.460	32.593	1.00	61.08
ATOM	19027	CB	VAL	2844	38.645	21.343	32.336	1.00	60.81
ATOM	19028	CG1	VAL	2844	37.385	20.609	32.764	1.00	60.34
ATOM	19029	CG2	VAL	2844	38.775	22.662	33.080	1.00	60.79
ATOM	19030	C	VAL	2844	40.066	20.259	34.101	1.00	61.01
ATOM	19031	O	VAL	2844	40.803	21.001	34.754	1.00	60.58
ATOM	19032	N	ASN	2845	39.389	19.251	34.644	1.00	61.15
ATOM	19033	CA	ASN	2845	39.460	18.947	36.071	1.00	61.73
ATOM	19034	CB	ASN	2845	38.364	17.946	36.449	1.00	60.56
ATOM	19035	CG	ASN	2845	36.970	18.499	36.230	1.00	59.61
ATOM	19036	OD1	ASN	2845	36.548	19.436	36.907	1.00	58.50
ATOM	19037	ND2	ASN	2845	36.249	17.924	35.275	1.00	59.70
ATOM	19038	C	ASN	2845	40.821	18.388	36.475	1.00	62.60
ATOM	19039	O	ASN	2845	41.296	18.629	37.586	1.00	62.03
ATOM	19040	N	ILE	2846	41.441	17.636	35.570	1.00	64.05
ATOM	19041	CA	ILE	2846	42.750	17.046	35.831	1.00	65.55
ATOM	19042	CB	ILE	2846	43.208	16.151	34.651	1.00	65.57
ATOM	19043	CG2	ILE	2846	44.609	15.612	34.915	1.00	65.70
ATOM	19044	CG1	ILE	2846	42.223	14.995	34.453	1.00	65.59
ATOM	19045	CD1	ILE	2846	42.118	14.057	35.643	1.00	65.41
ATOM	19046	C	ILE	2846	43.795	18.137	36.051	1.00	66.57
ATOM	19047	O	ILE	2846	44.490	18.150	37.066	1.00	66.67

ATOM	19048	N	PHE	2847	43.896	19.053	35.092	1.00	67.71
ATOM	19049	CA	PHE	2847	44.855	20.149	35.172	1.00	68.89
ATOM	19050	CB	PHE	2847	45.158	20.684	33.771	1.00	69.22
ATOM	19051	CG	PHE	2847	45.618	19.630	32.807	1.00	69.88
ATOM	19052	CD1	PHE	2847	46.776	18.899	33.055	1.00	70.09
ATOM	19053	CD2	PHE	2847	44.892	19.365	31.649	1.00	70.08
ATOM	19054	CE1	PHE	2847	47.206	17.918	32.164	1.00	70.40
ATOM	19055	CE2	PHE	2847	45.311	18.387	30.751	1.00	70.36
ATOM	19056	CZ	PHE	2847	46.471	17.661	31.009	1.00	70.74
ATOM	19057	C	PHE	2847	44.333	21.284	36.050	1.00	69.49
ATOM	19058	O	PHE	2847	45.040	22.262	36.299	1.00	69.68
ATOM	19059	N	GLY	2848	43.094	21.149	36.513	1.00	69.83
ATOM	19060	CA	GLY	2848	42.502	22.174	37.353	1.00	70.24
ATOM	19061	C	GLY	2848	42.298	23.478	36.605	1.00	70.50
ATOM	19062	O	GLY	2848	42.086	24.528	37.212	1.00	70.31
ATOM	19063	N	GLY	2849	42.363	23.407	35.280	1.00	71.04
ATOM	19064	CA	GLY	2849	42.185	24.591	34.459	1.00	71.60
ATOM	19065	C	GLY	2849	42.700	24.367	33.051	1.00	72.16
ATOM	19066	O	GLY	2849	42.776	23.228	32.589	1.00	72.14
ATOM	19067	N	TYR	2850	43.056	25.450	32.366	1.00	72.95
ATOM	19068	CA	TYR	2850	43.570	25.353	31.005	1.00	73.65
ATOM	19069	CB	TYR	2850	42.679	26.142	30.038	1.00	73.69
ATOM	19070	CG	TYR	2850	41.257	25.633	29.969	1.00	74.01
ATOM	19071	CD1	TYR	2850	40.353	25.887	31.001	1.00	74.35
ATOM	19072	CE1	TYR	2850	39.050	25.395	30.956	1.00	74.49
ATOM	19073	CD2	TYR	2850	40.821	24.871	28.883	1.00	74.02
ATOM	19074	CE2	TYR	2850	39.520	24.373	28.828	1.00	74.41
ATOM	19075	CZ	TYR	2850	38.641	24.639	29.868	1.00	74.86
ATOM	19076	OH	TYR	2850	37.355	24.146	29.826	1.00	75.22
ATOM	19077	C	TYR	2850	45.007	25.853	30.907	1.00	74.10
ATOM	19078	O	TYR	2850	45.256	27.059	30.847	1.00	74.16
ATOM	19079	N	LYS	2851	45.947	24.913	30.892	1.00	74.74
ATOM	19080	CA	LYS	2851	47.369	25.229	30.801	1.00	75.33
ATOM	19081	CB	LYS	2851	48.166	24.299	31.719	1.00	75.40
ATOM	19082	CG	LYS	2851	47.704	24.325	33.168	1.00	75.61
ATOM	19083	CD	LYS	2851	48.399	23.258	33.998	1.00	75.38
ATOM	19084	CE	LYS	2851	47.875	23.249	35.426	1.00	75.26
ATOM	19085	NZ	LYS	2851	48.476	22.152	36.233	1.00	74.92
ATOM	19086	C	LYS	2851	47.845	25.070	29.358	1.00	75.66
ATOM	19087	O	LYS	2851	47.572	24.057	28.714	1.00	76.01
ATOM	19088	N	VAL	2852	48.557	26.073	28.857	1.00	75.85
ATOM	19089	CA	VAL	2852	49.062	26.043	27.489	1.00	76.08
ATOM	19090	CB	VAL	2852	49.525	27.448	27.036	1.00	75.99
ATOM	19091	CG1	VAL	2852	49.922	27.421	25.568	1.00	75.65
ATOM	19092	CG2	VAL	2852	48.417	28.463	27.273	1.00	75.82
ATOM	19093	C	VAL	2852	50.234	25.074	27.346	1.00	76.39
ATOM	19094	O	VAL	2852	51.395	25.484	27.394	1.00	76.33
ATOM	19095	N	GLN	2853	49.930	23.789	27.173	1.00	76.70
ATOM	19096	CA	GLN	2853	50.971	22.777	27.016	1.00	77.12
ATOM	19097	CB	GLN	2853	50.360	21.375	26.913	1.00	77.23
ATOM	19098	CG	GLN	2853	50.094	20.680	28.247	1.00	76.94
ATOM	19099	CD	GLN	2853	48.944	21.289	29.021	1.00	76.79
ATOM	19100	OE1	GLN	2853	47.825	21.379	28.519	1.00	76.67
ATOM	19101	NE2	GLN	2853	49.210	21.699	30.256	1.00	77.11
ATOM	19102	C	GLN	2853	51.813	23.054	25.774	1.00	77.33
ATOM	19103	O	GLN	2853	51.369	23.740	24.853	1.00	77.15
ATOM	19104	N	GLY	2854	53.027	22.514	25.755	1.00	77.75
ATOM	19105	CA	GLY	2854	53.911	22.717	24.622	1.00	78.29
ATOM	19106	C	GLY	2854	55.254	23.293	25.028	1.00	78.76
ATOM	19107	O	GLY	2854	56.190	23.331	24.228	1.00	78.78
ATOM	19108	N	ARG	2855	55.348	23.744	26.276	1.00	79.02
ATOM	19109	CA	ARG	2855	56.584	24.320	26.800	1.00	79.07
ATOM	19110	CB	ARG	2855	56.271	25.282	27.954	1.00	79.32
ATOM	19111	CG	ARG	2855	55.397	26.471	27.572	1.00	79.76
ATOM	19112	CD	ARG	2855	56.115	27.420	26.620	1.00	80.09
ATOM	19113	NE	ARG	2855	55.254	28.516	26.174	1.00	80.24
ATOM	19114	CZ	ARG	2855	54.727	29.437	26.976	1.00	79.98
ATOM	19115	NH1	ARG	2855	54.968	29.406	28.280	1.00	79.86
ATOM	19116	NH2	ARG	2855	53.956	30.393	26.473	1.00	79.79
ATOM	19117	C	ARG	2855	57.524	23.222	27.293	1.00	78.89
ATOM	19118	O	ARG	2855	57.079	22.176	27.767	1.00	78.88
ATOM	19119	N	GLY	2856	58.826	23.468	27.179	1.00	78.53
ATOM	19120	CA	GLY	2856	59.805	22.492	27.619	1.00	78.02
ATOM	19121	C	GLY	2856	60.118	21.456	26.557	1.00	77.79
ATOM	19122	O	GLY	2856	59.439	21.382	25.532	1.00	77.80
ATOM	19123	N	ASP	2857	61.150	20.655	26.802	1.00	77.36
ATOM	19124	CA	ASP	2857	61.555	19.616	25.861	1.00	76.70

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ATOM  19125  CB   ASP  2857      63.077  19.446  25.875  1.00  76.96
ATOM  19126  CG   ASP  2857      63.801  20.634  25.273  1.00  77.36
ATOM  19127  OD1  ASP  2857      63.527  20.962  24.099  1.00  77.51
ATOM  19128  OD2  ASP  2857      64.644  21.235  25.971  1.00  77.38
ATOM  19129  C    ASP  2857      60.892  18.282  26.177  1.00  75.97
ATOM  19130  O    ASP  2857      60.391  17.606  25.280  1.00  76.56
ATOM  19131  N    GLU  2858      60.896  17.901  27.450  1.00  74.75
ATOM  19132  CA   GLU  2858      60.288  16.644  27.863  1.00  73.64
ATOM  19133  CB   GLU  2858      60.368  16.484  29.383  1.00  74.08
ATOM  19134  CG   GLU  2858      59.765  15.184  29.899  1.00  74.86
ATOM  19135  CD   GLU  2858      59.856  15.050  31.408  1.00  75.46
ATOM  19136  OE1  GLU  2858      60.986  15.074  31.941  1.00  75.97
ATOM  19137  OE2  GLU  2858      58.798  14.918  32.061  1.00  75.55
ATOM  19138  C    GLU  2858      58.831  16.596  27.416  1.00  72.68
ATOM  19139  O    GLU  2858      58.319  15.537  27.056  1.00  72.94
ATOM  19140  N    ALA  2859      58.172  17.751  27.441  1.00  71.17
ATOM  19141  CA   ALA  2859      56.774  17.848  27.036  1.00  69.66
ATOM  19142  CB   ALA  2859      56.091  18.987  27.786  1.00  69.37
ATOM  19143  C    ALA  2859      56.682  18.083  25.534  1.00  68.42
ATOM  19144  O    ALA  2859      55.790  17.560  24.864  1.00  68.24
ATOM  19145  N    GLY  2860      57.613  18.876  25.014  1.00  67.04
ATOM  19146  CA   GLY  2860      57.628  19.171  23.595  1.00  65.45
ATOM  19147  C    GLY  2860      57.836  17.929  22.753  1.00  64.41
ATOM  19148  O    GLY  2860      57.153  17.734  21.748  1.00  64.15
ATOM  19149  N    ASP  2861      58.782  17.087  23.160  1.00  63.48
ATOM  19150  CA   ASP  2861      59.070  15.856  22.433  1.00  62.53
ATOM  19151  CB   ASP  2861      60.439  15.302  22.831  1.00  62.67
ATOM  19152  CG   ASP  2861      61.562  16.288  22.579  1.00  63.21
ATOM  19153  OD1  ASP  2861      61.615  16.865  21.471  1.00  62.95
ATOM  19154  OD2  ASP  2861      62.397  16.478  23.487  1.00  63.46
ATOM  19155  C    ASP  2861      57.999  14.811  22.716  1.00  61.69
ATOM  19156  O    ASP  2861      57.830  13.860  21.953  1.00  61.58
ATOM  19157  N    GLN  2862      57.285  14.992  23.822  1.00  60.47
ATOM  19158  CA   GLN  2862      56.221  14.073  24.207  1.00  59.44
ATOM  19159  CB   GLN  2862      55.729  14.389  25.620  1.00  59.54
ATOM  19160  CG   GLN  2862      54.527  13.569  26.050  1.00  59.67
ATOM  19161  CD   GLN  2862      54.800  12.080  26.016  1.00  59.97
ATOM  19162  OE1  GLN  2862      55.653  11.578  26.748  1.00  60.86
ATOM  19163  NE2  GLN  2862      54.078  11.366  25.160  1.00  59.63
ATOM  19164  C    GLN  2862      55.061  14.194  23.227  1.00  58.25
ATOM  19165  O    GLN  2862      54.494  13.193  22.797  1.00  58.14
ATOM  19166  N    LEU  2863      54.712  15.429  22.884  1.00  57.06
ATOM  19167  CA   LEU  2863      53.625  15.679  21.951  1.00  56.74
ATOM  19168  CB   LEU  2863      53.350  17.181  21.844  1.00  57.27
ATOM  19169  CG   LEU  2863      52.854  17.884  23.111  1.00  57.78
ATOM  19170  CD1  LEU  2863      52.796  19.385  22.873  1.00  58.08
ATOM  19171  CD2  LEU  2863      51.485  17.347  23.497  1.00  57.79
ATOM  19172  C    LEU  2863      53.988  15.128  20.580  1.00  56.01
ATOM  19173  O    LEU  2863      53.163  14.504  19.911  1.00  56.51
ATOM  19174  N    LEU  2864      55.230  15.358  20.168  1.00  54.58
ATOM  19175  CA   LEU  2864      55.700  14.882  18.873  1.00  53.21
ATOM  19176  CB   LEU  2864      57.106  15.427  18.596  1.00  53.69
ATOM  19177  CG   LEU  2864      57.598  15.447  17.145  1.00  54.10
ATOM  19178  CD1  LEU  2864      58.822  16.342  17.047  1.00  54.57
ATOM  19179  CD2  LEU  2864      57.911  14.043  16.669  1.00  53.90
ATOM  19180  C    LEU  2864      55.707  13.355  18.879  1.00  51.65
ATOM  19181  O    LEU  2864      55.486  12.717  17.847  1.00  50.82
ATOM  19182  N    SER  2865      55.954  12.781  20.053  1.00  49.04
ATOM  19183  CA   SER  2865      55.975  11.332  20.209  1.00  47.06
ATOM  19184  CB   SER  2865      56.542  10.954  21.581  1.00  46.62
ATOM  19185  OG   SER  2865      56.593   9.548  21.749  1.00  44.01
ATOM  19186  C    SER  2865      54.561  10.774  20.062  1.00  45.80
ATOM  19187  O    SER  2865      54.346   9.778  19.367  1.00  44.53
ATOM  19188  N    ASP  2866      53.600  11.417  20.720  1.00  44.91
ATOM  19189  CA   ASP  2866      52.210  10.976  20.645  1.00  44.58
ATOM  19190  CB   ASP  2866      51.329  11.752  21.631  1.00  45.13
ATOM  19191  CG   ASP  2866      51.719  11.514  23.080  1.00  45.03
ATOM  19192  OD1  ASP  2866      51.989  10.352  23.452  1.00  44.80
ATOM  19193  OD2  ASP  2866      51.740  12.489  23.855  1.00  46.12
ATOM  19194  C    ASP  2866      51.687  11.180  19.229  1.00  44.24
ATOM  19195  O    ASP  2866      50.975  10.329  18.694  1.00  45.01
ATOM  19196  N    ALA  2867      52.043  12.310  18.626  1.00  42.65
ATOM  19197  CA   ALA  2867      51.612  12.610  17.267  1.00  41.30
ATOM  19198  CB   ALA  2867      52.178  13.952  16.820  1.00  40.89
ATOM  19199  C    ALA  2867      52.077  11.498  16.328  1.00  40.67
ATOM  19200  O    ALA  2867      51.325  11.051  15.461  1.00  38.64
ATOM  19201  N    LEU  2868      53.318  11.052  16.506  1.00  39.50
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ATOM	19202	CA	LEU	2868	53.862	9.982	15.674	1.00	39.13
ATOM	19203	CB	LEU	2868	55.375	9.852	15.881	1.00	39.80
ATOM	19204	CG	LEU	2868	56.263	10.908	15.223	1.00	39.60
ATOM	19205	CD1	LEU	2868	57.701	10.724	15.682	1.00	40.79
ATOM	19206	CD2	LEU	2868	56.167	10.790	13.709	1.00	40.12
ATOM	19207	C	LEU	2868	53.189	8.655	16.003	1.00	38.24
ATOM	19208	O	LEU	2868	52.981	7.817	15.124	1.00	37.72
ATOM	19209	N	ALA	2869	52.853	8.470	17.275	1.00	36.58
ATOM	19210	CA	ALA	2869	52.197	7.246	17.723	1.00	36.98
ATOM	19211	CB	ALA	2869	52.156	7.206	19.245	1.00	36.32
ATOM	19212	C	ALA	2869	50.782	7.165	17.157	1.00	36.13
ATOM	19213	O	ALA	2869	50.346	6.109	16.699	1.00	37.03
ATOM	19214	N	LEU	2870	50.070	8.287	17.195	1.00	35.62
ATOM	19215	CA	LEU	2870	48.705	8.349	16.684	1.00	35.07
ATOM	19216	CB	LEU	2870	48.091	9.719	16.990	1.00	35.82
ATOM	19217	CG	LEU	2870	47.905	10.070	18.471	1.00	36.77
ATOM	19218	CD1	LEU	2870	47.517	11.530	18.606	1.00	37.65
ATOM	19219	CD2	LEU	2870	46.842	9.171	19.087	1.00	37.97
ATOM	19220	C	LEU	2870	48.703	8.099	15.180	1.00	33.74
ATOM	19221	O	LEU	2870	47.826	7.413	14.655	1.00	32.74
ATOM	19222	N	GLU	2871	49.692	8.656	14.489	1.00	33.03
ATOM	19223	CA	GLU	2871	49.807	8.480	13.047	1.00	31.65
ATOM	19224	CB	GLU	2871	50.952	9.338	12.501	1.00	32.99
ATOM	19225	CG	GLU	2871	51.193	9.165	11.011	1.00	33.67
ATOM	19226	CD	GLU	2871	52.375	9.974	10.518	1.00	34.78
ATOM	19227	OE1	GLU	2871	53.477	9.806	11.085	1.00	33.73
ATOM	19228	OE2	GLU	2871	52.205	10.766	9.567	1.00	35.40
ATOM	19229	C	GLU	2871	50.061	7.015	12.715	1.00	31.63
ATOM	19230	O	GLU	2871	49.438	6.460	11.811	1.00	31.20
ATOM	19231	N	ALA	2872	50.975	6.391	13.451	1.00	30.57
ATOM	19232	CA	ALA	2872	51.306	4.988	13.221	1.00	30.98
ATOM	19233	CB	ALA	2872	52.506	4.588	14.076	1.00	30.03
ATOM	19234	C	ALA	2872	50.110	4.095	13.544	1.00	29.80
ATOM	19235	O	ALA	2872	49.949	3.020	12.965	1.00	28.80
ATOM	19236	N	ALA	2873	49.274	4.561	14.468	1.00	29.24
ATOM	19237	CA	ALA	2873	48.086	3.832	14.898	1.00	27.99
ATOM	19238	CB	ALA	2873	47.538	4.449	16.185	1.00	27.72
ATOM	19239	C	ALA	2873	47.010	3.825	13.818	1.00	28.11
ATOM	19240	O	ALA	2873	46.158	2.935	13.782	1.00	27.45
ATOM	19241	N	GLY	2874	47.044	4.821	12.939	1.00	26.89
ATOM	19242	CA	GLY	2874	46.059	4.883	11.874	1.00	27.96
ATOM	19243	C	GLY	2874	45.396	6.235	11.685	1.00	27.38
ATOM	19244	O	GLY	2874	44.639	6.428	10.736	1.00	27.45
ATOM	19245	N	ALA	2875	45.671	7.175	12.583	1.00	28.20
ATOM	19246	CA	ALA	2875	45.085	8.502	12.481	1.00	28.33
ATOM	19247	CB	ALA	2875	45.556	9.366	13.640	1.00	29.66
ATOM	19248	C	ALA	2875	45.462	9.154	11.147	1.00	30.07
ATOM	19249	O	ALA	2875	46.634	9.176	10.768	1.00	30.07
ATOM	19250	N	GLN	2876	44.466	9.679	10.436	1.00	29.85
ATOM	19251	CA	GLN	2876	44.704	10.324	9.146	1.00	31.07
ATOM	19252	CB	GLN	2876	43.634	9.895	8.141	1.00	32.52
ATOM	19253	CG	GLN	2876	43.582	8.393	7.917	1.00	33.27
ATOM	19254	CD	GLN	2876	42.514	7.983	6.922	1.00	35.64
ATOM	19255	OE1	GLN	2876	42.635	8.238	5.720	1.00	37.92
ATOM	19256	NE2	GLN	2876	41.459	7.346	7.417	1.00	34.07
ATOM	19257	C	GLN	2876	44.716	11.842	9.270	1.00	32.63
ATOM	19258	O	GLN	2876	44.871	12.556	8.278	1.00	32.11
ATOM	19259	N	LEU	2877	44.560	12.321	10.500	1.00	34.15
ATOM	19260	CA	LEU	2877	44.547	13.750	10.794	1.00	35.91
ATOM	19261	CB	LEU	2877	43.154	14.329	10.547	1.00	36.23
ATOM	19262	CG	LEU	2877	42.960	15.163	9.283	1.00	37.74
ATOM	19263	CD1	LEU	2877	41.505	15.594	9.176	1.00	37.26
ATOM	19264	CD2	LEU	2877	43.877	16.373	9.332	1.00	37.89
ATOM	19265	C	LEU	2877	44.933	13.990	12.244	1.00	36.30
ATOM	19266	O	LEU	2877	44.750	13.117	13.090	1.00	36.32
ATOM	19267	N	LEU	2878	45.465	15.178	12.522	1.00	37.48
ATOM	19268	CA	LEU	2878	45.875	15.555	13.873	1.00	38.35
ATOM	19269	CB	LEU	2878	47.379	15.346	14.057	1.00	37.59
ATOM	19270	CG	LEU	2878	47.944	15.762	15.418	1.00	38.15
ATOM	19271	CD1	LEU	2878	47.332	14.906	16.517	1.00	37.53
ATOM	19272	CD2	LEU	2878	49.458	15.611	15.411	1.00	38.68
ATOM	19273	C	LEU	2878	45.535	17.017	14.151	1.00	39.83
ATOM	19274	O	LEU	2878	45.609	17.861	13.257	1.00	39.08
ATOM	19275	N	VAL	2879	45.162	17.309	15.393	1.00	41.38
ATOM	19276	CA	VAL	2879	44.820	18.670	15.793	1.00	42.90
ATOM	19277	CB	VAL	2879	43.342	18.778	16.231	1.00	42.29
ATOM	19278	CG1	VAL	2879	43.035	20.196	16.685	1.00	42.71

ATOM	19279	CG2	VAL	2879	42.433	18.384	15.086	1.00	41.99
ATOM	19280	C	VAL	2879	45.700	19.133	16.949	1.00	44.01
ATOM	19281	O	VAL	2879	45.791	18.468	17.983	1.00	43.86
ATOM	19282	N	LEU	2880	46.352	20.276	16.760	1.00	45.45
ATOM	19283	CA	LEU	2880	47.221	20.852	17.781	1.00	47.07
ATOM	19284	CB	LEU	2880	48.564	21.261	17.170	1.00	47.30
ATOM	19285	CG	LEU	2880	49.446	20.136	16.632	1.00	47.79
ATOM	19286	CD1	LEU	2880	50.688	20.726	15.975	1.00	48.71
ATOM	19287	CD2	LEU	2880	49.832	19.201	17.770	1.00	47.63
ATOM	19288	C	LEU	2880	46.539	22.073	18.381	1.00	48.19
ATOM	19289	O	LEU	2880	46.213	23.022	17.667	1.00	48.54
ATOM	19290	N	GLU	2881	46.326	22.047	19.692	1.00	49.26
ATOM	19291	CA	GLU	2881	45.668	23.154	20.377	1.00	51.27
ATOM	19292	CB	GLU	2881	44.478	22.635	21.186	1.00	51.11
ATOM	19293	CG	GLU	2881	43.547	23.724	21.684	1.00	52.03
ATOM	19294	CD	GLU	2881	42.497	23.196	22.631	1.00	51.94
ATOM	19295	OE1	GLU	2881	41.810	22.220	22.271	1.00	51.97
ATOM	19296	OE2	GLU	2881	42.358	23.756	23.740	1.00	53.44
ATOM	19297	C	GLU	2881	46.629	23.894	21.304	1.00	52.45
ATOM	19298	O	GLU	2881	47.177	23.308	22.239	1.00	51.90
ATOM	19299	N	CYS	2882	46.818	25.185	21.038	1.00	53.90
ATOM	19300	CA	CYS	2882	47.705	26.033	21.832	1.00	55.11
ATOM	19301	CB	CYS	2882	47.038	26.398	23.159	1.00	55.59
ATOM	19302	SG	CYS	2882	45.596	27.473	22.965	1.00	57.79
ATOM	19303	C	CYS	2882	49.054	25.381	22.095	1.00	55.25
ATOM	19304	O	CYS	2882	49.260	24.729	23.119	1.00	55.61
ATOM	19305	N	VAL	2883	49.974	25.570	21.158	1.00	55.88
ATOM	19306	CA	VAL	2883	51.312	25.006	21.264	1.00	56.54
ATOM	19307	CB	VAL	2883	51.364	23.606	20.601	1.00	56.77
ATOM	19308	CG1	VAL	2883	50.923	23.700	19.150	1.00	57.14
ATOM	19309	CG2	VAL	2883	52.764	23.029	20.694	1.00	56.92
ATOM	19310	C	VAL	2883	52.291	25.949	20.568	1.00	56.70
ATOM	19311	O	VAL	2883	51.988	26.489	19.502	1.00	56.49
ATOM	19312	N	PRO	2884	53.476	26.168	21.167	1.00	56.87
ATOM	19313	CD	PRO	2884	54.038	25.483	22.342	1.00	56.82
ATOM	19314	CA	PRO	2884	54.473	27.060	20.565	1.00	56.93
ATOM	19315	CB	PRO	2884	55.699	26.863	21.459	1.00	56.72
ATOM	19316	CG	PRO	2884	55.503	25.482	22.019	1.00	57.13
ATOM	19317	C	PRO	2884	54.747	26.718	19.105	1.00	57.27
ATOM	19318	O	PRO	2884	54.999	25.562	18.766	1.00	57.23
ATOM	19319	N	VAL	2885	54.689	27.735	18.250	1.00	56.98
ATOM	19320	CA	VAL	2885	54.908	27.564	16.818	1.00	57.68
ATOM	19321	CB	VAL	2885	55.176	28.918	16.129	1.00	57.41
ATOM	19322	CG1	VAL	2885	55.141	28.747	14.620	1.00	57.11
ATOM	19323	CG2	VAL	2885	54.150	29.942	16.578	1.00	57.26
ATOM	19324	C	VAL	2885	56.079	26.632	16.519	1.00	58.32
ATOM	19325	O	VAL	2885	56.046	25.867	15.553	1.00	58.54
ATOM	19326	N	GLU	2886	57.108	26.701	17.358	1.00	58.72
ATOM	19327	CA	GLU	2886	58.300	25.876	17.194	1.00	58.51
ATOM	19328	CB	GLU	2886	59.282	26.138	18.341	1.00	59.10
ATOM	19329	CG	GLU	2886	59.379	27.602	18.763	1.00	59.54
ATOM	19330	CD	GLU	2886	59.529	28.549	17.586	1.00	59.84
ATOM	19331	OE1	GLU	2886	60.465	28.357	16.779	1.00	60.96
ATOM	19332	OE2	GLU	2886	58.711	29.488	17.473	1.00	59.20
ATOM	19333	C	GLU	2886	57.937	24.394	17.164	1.00	58.20
ATOM	19334	O	GLU	2886	58.373	23.650	16.283	1.00	57.63
ATOM	19335	N	LEU	2887	57.131	23.975	18.134	1.00	57.62
ATOM	19336	CA	LEU	2887	56.706	22.586	18.235	1.00	57.41
ATOM	19337	CB	LEU	2887	55.937	22.371	19.540	1.00	56.08
ATOM	19338	CG	LEU	2887	56.331	21.145	20.368	1.00	55.97
ATOM	19339	CD1	LEU	2887	55.545	21.140	21.668	1.00	55.92
ATOM	19340	CD2	LEU	2887	56.075	19.875	19.578	1.00	55.54
ATOM	19341	C	LEU	2887	55.833	22.193	17.046	1.00	57.47
ATOM	19342	O	LEU	2887	55.948	21.086	16.519	1.00	57.79
ATOM	19343	N	ALA	2888	54.962	23.106	16.628	1.00	57.65
ATOM	19344	CA	ALA	2888	54.071	22.861	15.500	1.00	57.47
ATOM	19345	CB	ALA	2888	53.138	24.051	15.306	1.00	57.84
ATOM	19346	C	ALA	2888	54.859	22.604	14.219	1.00	57.89
ATOM	19347	O	ALA	2888	54.491	21.751	13.411	1.00	57.53
ATOM	19348	N	LYS	2889	55.944	23.352	14.040	1.00	57.61
ATOM	19349	CA	LYS	2889	56.790	23.211	12.862	1.00	57.71
ATOM	19350	CB	LYS	2889	57.952	24.205	12.929	1.00	58.61
ATOM	19351	CG	LYS	2889	57.518	25.662	12.982	1.00	60.67
ATOM	19352	CD	LYS	2889	58.694	26.590	13.263	1.00	62.37
ATOM	19353	CE	LYS	2889	58.243	28.043	13.347	1.00	62.84
ATOM	19354	NZ	LYS	2889	59.353	28.959	13.729	1.00	63.21
ATOM	19355	C	LYS	2889	57.337	21.794	12.763	1.00	57.10

ATOM	19356	O	LYS	2889	57.302	21.180	11.696	1.00	57.17
ATOM	19357	N	ARG	2890	57.840	21.281	13.881	1.00	56.24
ATOM	19358	CA	ARG	2890	58.401	19.936	13.923	1.00	55.63
ATOM	19359	CB	ARG	2890	58.973	19.639	15.311	1.00	56.65
ATOM	19360	CG	ARG	2890	60.157	20.501	15.697	1.00	58.26
ATOM	19361	CD	ARG	2890	60.844	19.945	16.934	1.00	60.00
ATOM	19362	NE	ARG	2890	59.947	19.894	18.084	1.00	61.53
ATOM	19363	CZ	ARG	2890	60.260	19.344	19.254	1.00	62.29
ATOM	19364	NH1	ARG	2890	61.451	18.791	19.433	1.00	62.17
ATOM	19365	NH2	ARG	2890	59.381	19.349	20.246	1.00	63.05
ATOM	19366	C	ARG	2890	57.364	18.880	13.573	1.00	54.19
ATOM	19367	O	ARG	2890	57.502	18.162	12.584	1.00	53.84
ATOM	19368	N	ILE	2891	56.329	18.790	14.401	1.00	52.97
ATOM	19369	CA	ILE	2891	55.256	17.826	14.202	1.00	51.09
ATOM	19370	CB	ILE	2891	54.099	18.088	15.187	1.00	51.37
ATOM	19371	CG2	ILE	2891	52.970	17.095	14.947	1.00	50.95
ATOM	19372	CG1	ILE	2891	54.613	17.981	16.626	1.00	50.98
ATOM	19373	CD1	ILE	2891	53.598	18.382	17.676	1.00	50.45
ATOM	19374	C	ILE	2891	54.712	17.874	12.777	1.00	50.48
ATOM	19375	O	ILE	2891	54.621	16.845	12.108	1.00	50.45
ATOM	19376	N	THR	2892	54.358	19.069	12.316	1.00	49.45
ATOM	19377	CA	THR	2892	53.816	19.230	10.973	1.00	49.23
ATOM	19378	CB	THR	2892	53.557	20.713	10.637	1.00	48.82
ATOM	19379	OG1	THR	2892	52.662	21.275	11.603	1.00	49.13
ATOM	19380	CG2	THR	2892	52.937	20.843	9.249	1.00	48.85
ATOM	19381	C	THR	2892	54.740	18.649	9.908	1.00	49.30
ATOM	19382	O	THR	2892	54.280	18.005	8.965	1.00	48.82
ATOM	19383	N	GLU	2893	56.041	18.878	10.056	1.00	49.78
ATOM	19384	CA	GLU	2893	57.007	18.369	9.088	1.00	50.32
ATOM	19385	CB	GLU	2893	58.245	19.268	9.043	1.00	51.93
ATOM	19386	CG	GLU	2893	57.979	20.650	8.460	1.00	54.14
ATOM	19387	CD	GLU	2893	59.255	21.412	8.163	1.00	55.53
ATOM	19388	OE1	GLU	2893	60.036	21.666	9.106	1.00	55.46
ATOM	19389	OE2	GLU	2893	59.477	21.757	6.982	1.00	56.24
ATOM	19390	C	GLU	2893	57.423	16.933	9.381	1.00	49.42
ATOM	19391	O	GLU	2893	57.953	16.243	8.509	1.00	49.42
ATOM	19392	N	ALA	2894	57.174	16.487	10.609	1.00	48.11
ATOM	19393	CA	ALA	2894	57.518	15.131	11.021	1.00	46.74
ATOM	19394	CB	ALA	2894	57.718	15.079	12.531	1.00	46.75
ATOM	19395	C	ALA	2894	56.438	14.135	10.604	1.00	45.44
ATOM	19396	O	ALA	2894	56.721	12.959	10.379	1.00	45.28
ATOM	19397	N	LEU	2895	55.200	14.608	10.500	1.00	44.09
ATOM	19398	CA	LEU	2895	54.097	13.740	10.112	1.00	42.66
ATOM	19399	CB	LEU	2895	52.845	14.067	10.932	1.00	43.61
ATOM	19400	CG	LEU	2895	52.966	13.940	12.450	1.00	43.86
ATOM	19401	CD1	LEU	2895	51.651	14.323	13.105	1.00	44.30
ATOM	19402	CD2	LEU	2895	53.350	12.520	12.814	1.00	45.06
ATOM	19403	C	LEU	2895	53.777	13.884	8.631	1.00	41.50
ATOM	19404	O	LEU	2895	53.887	14.973	8.067	1.00	41.74
ATOM	19405	N	ALA	2896	53.384	12.776	8.009	1.00	39.31
ATOM	19406	CA	ALA	2896	53.020	12.769	6.597	1.00	37.81
ATOM	19407	CB	ALA	2896	53.230	11.380	6.003	1.00	37.19
ATOM	19408	C	ALA	2896	51.558	13.178	6.468	1.00	37.41
ATOM	19409	O	ALA	2896	51.144	13.749	5.458	1.00	35.35
ATOM	19410	N	ILE	2897	50.776	12.874	7.499	1.00	37.72
ATOM	19411	CA	ILE	2897	49.359	13.222	7.510	1.00	37.82
ATOM	19412	CB	ILE	2897	48.589	12.404	8.572	1.00	38.19
ATOM	19413	CG2	ILE	2897	48.562	10.938	8.182	1.00	35.52
ATOM	19414	CG1	ILE	2897	49.237	12.602	9.947	1.00	36.77
ATOM	19415	CD1	ILE	2897	48.490	11.937	11.083	1.00	38.83
ATOM	19416	C	ILE	2897	49.202	14.706	7.825	1.00	38.40
ATOM	19417	O	ILE	2897	49.987	15.274	8.585	1.00	37.92
ATOM	19418	N	PRO	2898	48.180	15.354	7.247	1.00	38.51
ATOM	19419	CD	PRO	2898	47.116	14.796	6.397	1.00	38.81
ATOM	19420	CA	PRO	2898	47.953	16.781	7.492	1.00	39.39
ATOM	19421	CB	PRO	2898	46.729	17.090	6.629	1.00	39.31
ATOM	19422	CG	PRO	2898	46.001	15.787	6.601	1.00	40.01
ATOM	19423	C	PRO	2898	47.730	17.097	8.968	1.00	40.59
ATOM	19424	O	PRO	2898	46.998	16.391	9.665	1.00	40.56
ATOM	19425	N	VAL	2899	48.375	18.158	9.441	1.00	40.40
ATOM	19426	CA	VAL	2899	48.252	18.569	10.832	1.00	40.89
ATOM	19427	CB	VAL	2899	49.641	18.739	11.484	1.00	41.08
ATOM	19428	CG1	VAL	2899	49.487	19.099	12.952	1.00	40.58
ATOM	19429	CG2	VAL	2899	50.442	17.457	11.334	1.00	41.04
ATOM	19430	C	VAL	2899	47.489	19.882	10.942	1.00	41.61
ATOM	19431	O	VAL	2899	48.002	20.946	10.594	1.00	42.66
ATOM	19432	N	ILE	2900	46.254	19.797	11.424	1.00	41.85

ATOM	19433	CA	ILE	2900	45.409	20.973	11.588	1.00	40.80
ATOM	19434	CB	ILE	2900	43.918	20.589	11.510	1.00	40.42
ATOM	19435	CG2	ILE	2900	43.046	21.818	11.739	1.00	40.48
ATOM	19436	CG1	ILE	2900	43.627	19.954	10.146	1.00	40.12
ATOM	19437	CD1	ILE	2900	42.223	19.401	10.000	1.00	38.79
ATOM	19438	C	ILE	2900	45.701	21.599	12.943	1.00	40.37
ATOM	19439	O	ILE	2900	45.760	20.902	13.955	1.00	40.86
ATOM	19440	N	GLY	2901	45.892	22.913	12.964	1.00	40.33
ATOM	19441	CA	GLY	2901	46.189	23.576	14.219	1.00	39.83
ATOM	19442	C	GLY	2901	45.312	24.771	14.534	1.00	39.82
ATOM	19443	O	GLY	2901	44.743	25.400	13.644	1.00	39.28
ATOM	19444	N	ILE	2902	45.198	25.071	15.822	1.00	40.24
ATOM	19445	CA	ILE	2902	44.414	26.203	16.287	1.00	41.59
ATOM	19446	CB	ILE	2902	43.043	25.758	16.859	1.00	41.56
ATOM	19447	CG2	ILE	2902	43.232	24.634	17.871	1.00	39.96
ATOM	19448	CG1	ILE	2902	42.333	26.957	17.490	1.00	42.23
ATOM	19449	CD1	ILE	2902	40.886	26.696	17.857	1.00	42.44
ATOM	19450	C	ILE	2902	45.225	26.913	17.364	1.00	42.95
ATOM	19451	O	ILE	2902	45.405	26.397	18.468	1.00	41.71
ATOM	19452	N	GLY	2903	45.729	28.096	17.027	1.00	44.58
ATOM	19453	CA	GLY	2903	46.535	28.845	17.972	1.00	45.63
ATOM	19454	C	GLY	2903	47.918	28.234	18.068	1.00	46.17
ATOM	19455	O	GLY	2903	48.531	28.218	19.136	1.00	46.79
ATOM	19456	N	ALA	2904	48.407	27.722	16.942	1.00	46.61
ATOM	19457	CA	ALA	2904	49.725	27.102	16.887	1.00	46.93
ATOM	19458	CB	ALA	2904	49.584	25.594	16.723	1.00	46.40
ATOM	19459	C	ALA	2904	50.565	27.674	15.749	1.00	46.66
ATOM	19460	O	ALA	2904	51.652	27.174	15.461	1.00	46.67
ATOM	19461	N	GLY	2905	50.056	28.718	15.100	1.00	47.11
ATOM	19462	CA	GLY	2905	50.786	29.331	14.004	1.00	47.45
ATOM	19463	C	GLY	2905	50.290	28.905	12.634	1.00	48.01
ATOM	19464	O	GLY	2905	49.434	28.027	12.517	1.00	48.29
ATOM	19465	N	ASN	2906	50.832	29.528	11.591	1.00	47.47
ATOM	19466	CA	ASN	2906	50.439	29.213	10.221	1.00	47.27
ATOM	19467	CB	ASN	2906	50.423	30.488	9.373	1.00	46.79
ATOM	19468	CG	ASN	2906	51.771	31.187	9.346	1.00	46.59
ATOM	19469	OD1	ASN	2906	51.940	32.206	8.674	1.00	47.15
ATOM	19470	ND2	ASN	2906	52.736	30.644	10.079	1.00	45.79
ATOM	19471	C	ASN	2906	51.374	28.190	9.585	1.00	47.11
ATOM	19472	O	ASN	2906	51.368	28.002	8.366	1.00	46.64
ATOM	19473	N	VAL	2907	52.173	27.530	10.418	1.00	47.09
ATOM	19474	CA	VAL	2907	53.118	26.526	9.941	1.00	47.56
ATOM	19475	CB	VAL	2907	54.234	26.269	10.980	1.00	48.05
ATOM	19476	CG1	VAL	2907	55.286	25.336	10.394	1.00	49.38
ATOM	19477	CG2	VAL	2907	54.866	27.584	11.404	1.00	48.66
ATOM	19478	C	VAL	2907	52.415	25.204	9.645	1.00	47.40
ATOM	19479	O	VAL	2907	52.875	24.419	8.816	1.00	46.82
ATOM	19480	N	THR	2908	51.299	24.965	10.326	1.00	46.84
ATOM	19481	CA	THR	2908	50.538	23.737	10.134	1.00	46.83
ATOM	19482	CB	THR	2908	49.387	23.644	11.145	1.00	46.34
ATOM	19483	OG1	THR	2908	48.608	24.845	11.091	1.00	47.58
ATOM	19484	CG2	THR	2908	49.932	23.460	12.550	1.00	45.22
ATOM	19485	C	THR	2908	49.966	23.646	8.722	1.00	47.30
ATOM	19486	O	THR	2908	49.862	24.649	8.013	1.00	47.83
ATOM	19487	N	ASP	2909	49.598	22.436	8.318	1.00	46.81
ATOM	19488	CA	ASP	2909	49.047	22.204	6.989	1.00	47.02
ATOM	19489	CB	ASP	2909	48.974	20.700	6.718	1.00	47.68
ATOM	19490	CG	ASP	2909	50.313	20.009	6.906	1.00	48.92
ATOM	19491	OD1	ASP	2909	51.248	20.299	6.127	1.00	49.06
ATOM	19492	OD2	ASP	2909	50.432	19.182	7.836	1.00	47.98
ATOM	19493	C	ASP	2909	47.666	22.831	6.832	1.00	47.23
ATOM	19494	O	ASP	2909	47.219	23.110	5.717	1.00	46.70
ATOM	19495	N	GLY	2910	46.995	23.057	7.956	1.00	46.85
ATOM	19496	CA	GLY	2910	45.672	23.650	7.914	1.00	46.10
ATOM	19497	C	GLY	2910	45.335	24.437	9.163	1.00	45.53
ATOM	19498	O	GLY	2910	46.113	24.473	10.115	1.00	44.71
ATOM	19499	N	GLN	2911	44.166	25.067	9.157	1.00	45.89
ATOM	19500	CA	GLN	2911	43.712	25.863	10.292	1.00	46.51
ATOM	19501	CB	GLN	2911	43.873	27.357	9.990	1.00	46.39
ATOM	19502	CG	GLN	2911	45.315	27.843	9.878	1.00	44.82
ATOM	19503	CD	GLN	2911	46.100	27.649	11.162	1.00	44.00
ATOM	19504	OE1	GLN	2911	45.634	27.997	12.246	1.00	43.65
ATOM	19505	NE2	GLN	2911	47.305	27.103	11.043	1.00	44.12
ATOM	19506	C	GLN	2911	42.250	25.577	10.619	1.00	47.63
ATOM	19507	O	GLN	2911	41.487	25.114	9.771	1.00	46.88
ATOM	19508	N	ILE	2912	41.867	25.853	11.860	1.00	48.52
ATOM	19509	CA	ILE	2912	40.492	25.652	12.290	1.00	50.21

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ATOM    19510  CB   ILE   2912      40.320  24.298  13.023  1.00 50.95
ATOM    19511  CG2  ILE   2912      41.195  24.257  14.270  1.00 51.75
ATOM    19512  CG1  ILE   2912      38.849  24.088  13.376  1.00 51.34
ATOM    19513  CD1  ILE   2912      38.484  22.641  13.645  1.00 52.84
ATOM    19514  C    ILE   2912      40.093  26.806  13.205  1.00 50.85
ATOM    19515  O    ILE   2912      40.870  27.222  14.066  1.00 51.15
ATOM    19516  N    LEU   2913      38.889  27.334  13.005  1.00 51.43
ATOM    19517  CA   LEU   2913      38.417  28.456  13.808  1.00 51.62
ATOM    19518  CB   LEU   2913      38.566  29.760  13.012  1.00 52.42
ATOM    19519  CG   LEU   2913      39.031  31.024  13.747  1.00 53.65
ATOM    19520  CD1  LEU   2913      39.235  32.140  12.739  1.00 53.91
ATOM    19521  CD2  LEU   2913      38.016  31.436  14.802  1.00 54.69
ATOM    19522  C    LEU   2913      36.964  28.277  14.240  1.00 50.63
ATOM    19523  O    LEU   2913      36.170  27.629  13.553  1.00 50.30
ATOM    19524  N    VAL   2914      36.627  28.853  15.389  1.00 49.32
ATOM    19525  CA   VAL   2914      35.274  28.778  15.922  1.00 47.68
ATOM    19526  CB   VAL   2914      35.275  28.908  17.455  1.00 48.06
ATOM    19527  CG1  VAL   2914      33.877  28.658  18.003  1.00 49.28
ATOM    19528  CG2  VAL   2914      36.268  27.930  18.050  1.00 47.75
ATOM    19529  C    VAL   2914      34.463  29.920  15.324  1.00 46.26
ATOM    19530  O    VAL   2914      34.721  31.092  15.601  1.00 45.66
ATOM    19531  N    MET   2915      33.486  29.570  14.496  1.00 43.97
ATOM    19532  CA   MET   2915      32.649  30.563  13.839  1.00 42.92
ATOM    19533  CB   MET   2915      31.500  29.873  13.106  1.00 40.64
ATOM    19534  CG   MET   2915      30.616  29.023  14.000  1.00 38.03
ATOM    19535  SD   MET   2915      28.938  28.996  13.368  1.00 33.08
ATOM    19536  CE   MET   2915      28.260  30.449  14.185  1.00 34.77
ATOM    19537  C    MET   2915      32.087  31.596  14.813  1.00 42.94
ATOM    19538  O    MET   2915      31.937  32.766  14.468  1.00 43.50
ATOM    19539  N    HIS   2916      31.778  31.156  16.028  1.00 43.84
ATOM    19540  CA   HIS   2916      31.228  32.041  17.047  1.00 43.99
ATOM    19541  CB   HIS   2916      30.839  31.221  18.279  1.00 43.48
ATOM    19542  CG   HIS   2916      29.606  30.396  18.080  1.00 42.85
ATOM    19543  CD2  HIS   2916      29.446  29.097  17.733  1.00 42.66
ATOM    19544  ND1  HIS   2916      28.336  30.925  18.176  1.00 42.76
ATOM    19545  CE1  HIS   2916      27.448  29.988  17.897  1.00 42.12
ATOM    19546  NE2  HIS   2916      28.095  28.870  17.624  1.00 42.80
ATOM    19547  C    HIS   2916      32.192  33.165  17.424  1.00 45.02
ATOM    19548  O    HIS   2916      31.772  34.232  17.871  1.00 43.97
ATOM    19549  N    ASP   2917      33.485  32.924  17.238  1.00 46.22
ATOM    19550  CA   ASP   2917      34.493  33.931  17.539  1.00 47.60
ATOM    19551  CB   ASP   2917      35.702  33.296  18.227  1.00 48.54
ATOM    19552  CG   ASP   2917      35.463  33.045  19.699  1.00 49.88
ATOM    19553  OD1  ASP   2917      35.083  34.002  20.404  1.00 51.64
ATOM    19554  OD2  ASP   2917      35.658  31.901  20.156  1.00 51.53
ATOM    19555  C    ASP   2917      34.938  34.638  16.266  1.00 47.64
ATOM    19556  O    ASP   2917      35.581  35.685  16.317  1.00 49.23
ATOM    19557  N    ALA   2918      34.587  34.060  15.123  1.00 47.15
ATOM    19558  CA   ALA   2918      34.944  34.631  13.833  1.00 46.36
ATOM    19559  CB   ALA   2918      34.938  33.551  12.764  1.00 45.96
ATOM    19560  C    ALA   2918      33.965  35.736  13.463  1.00 46.60
ATOM    19561  O    ALA   2918      34.275  36.607  12.651  1.00 45.86
ATOM    19562  N    PHE   2919      32.780  35.696  14.063  1.00 45.95
ATOM    19563  CA   PHE   2919      31.762  36.699  13.794  1.00 46.21
ATOM    19564  CB   PHE   2919      30.492  36.027  13.274  1.00 47.19
ATOM    19565  CG   PHE   2919      30.738  35.054  12.157  1.00 48.64
ATOM    19566  CD1  PHE   2919      31.476  35.427  11.038  1.00 49.33
ATOM    19567  CD2  PHE   2919      30.224  33.764  12.219  1.00 49.14
ATOM    19568  CE1  PHE   2919      31.698  34.527   9.996  1.00 49.77
ATOM    19569  CE2  PHE   2919      30.440  32.857  11.183  1.00 49.47
ATOM    19570  CZ   PHE   2919      31.177  33.239  10.070  1.00 49.73
ATOM    19571  C    PHE   2919      31.450  37.498  15.051  1.00 45.77
ATOM    19572  O    PHE   2919      30.435  38.193  15.122  1.00 45.54
ATOM    19573  N    GLY   2920      32.332  37.394  16.041  1.00 45.81
ATOM    19574  CA   GLY   2920      32.142  38.112  17.289  1.00 46.37
ATOM    19575  C    GLY   2920      30.782  37.867  17.909  1.00 46.48
ATOM    19576  O    GLY   2920      30.207  38.760  18.530  1.00 45.85
ATOM    19577  N    ILE   2921      30.268  36.653  17.741  1.00 46.20
ATOM    19578  CA   ILE   2921      28.965  36.290  18.286  1.00 47.25
ATOM    19579  CB   ILE   2921      28.450  34.974  17.665  1.00 46.36
ATOM    19580  CG2  ILE   2921      27.066  34.651  18.210  1.00 46.13
ATOM    19581  CG1  ILE   2921      28.410  35.101  16.140  1.00 46.06
ATOM    19582  CD1  ILE   2921      28.049  33.815  15.420  1.00 45.17
ATOM    19583  C    ILE   2921      29.040  36.120  19.801  1.00 48.32
ATOM    19584  O    ILE   2921      28.137  36.534  20.526  1.00 47.30
ATOM    19585  N    THR   2922      30.126  35.515  20.271  1.00 50.35
ATOM    19586  CA   THR   2922      30.316  35.285  21.696  1.00 53.99
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ATOM	19587	CB	THR	2922	31.599	34.487	21.960	1.00	53.75
ATOM	19588	OG1	THR	2922	32.721	35.209	21.442	1.00	55.46
ATOM	19589	CG2	THR	2922	31.524	33.127	21.287	1.00	53.60
ATOM	19590	C	THR	2922	30.394	36.593	22.476	1.00	56.52
ATOM	19591	O	THR	2922	30.209	37.673	21.915	1.00	57.67
ATOM	19592	N	GLY	2923	30.672	36.483	23.772	1.00	58.60
ATOM	19593	CA	GLY	2923	30.768	37.657	24.622	1.00	61.66
ATOM	19594	C	GLY	2923	31.545	38.803	24.004	1.00	63.68
ATOM	19595	O	GLY	2923	30.961	39.699	23.394	1.00	64.36
ATOM	19596	N	GLY	2924	32.864	38.779	24.162	1.00	64.67
ATOM	19597	CA	GLY	2924	33.688	39.835	23.607	1.00	66.50
ATOM	19598	C	GLY	2924	35.161	39.619	23.880	1.00	67.68
ATOM	19599	O	GLY	2924	36.015	39.989	23.072	1.00	68.28
ATOM	19600	N	HIS	2925	35.461	39.018	25.026	1.00	68.21
ATOM	19601	CA	HIS	2925	36.839	38.748	25.410	1.00	68.98
ATOM	19602	CB	HIS	2925	36.922	38.531	26.924	1.00	70.40
ATOM	19603	CG	HIS	2925	36.513	39.726	27.730	1.00	71.99
ATOM	19604	CD2	HIS	2925	35.508	39.900	28.620	1.00	72.41
ATOM	19605	ND1	HIS	2925	37.178	40.932	27.662	1.00	72.60
ATOM	19606	CE1	HIS	2925	36.601	41.797	28.477	1.00	72.46
ATOM	19607	NE2	HIS	2925	35.585	41.197	29.070	1.00	72.60
ATOM	19608	C	HIS	2925	37.384	37.524	24.674	1.00	68.50
ATOM	19609	O	HIS	2925	37.745	36.524	25.294	1.00	68.44
ATOM	19610	N	ILE	2926	37.442	37.613	23.348	1.00	67.83
ATOM	19611	CA	ILE	2926	37.940	36.516	22.524	1.00	67.07
ATOM	19612	CB	ILE	2926	37.816	36.838	21.019	1.00	67.36
ATOM	19613	CG2	ILE	2926	36.353	37.011	20.641	1.00	67.76
ATOM	19614	CG1	ILE	2926	38.613	38.102	20.691	1.00	67.33
ATOM	19615	CD1	ILE	2926	38.682	38.416	19.212	1.00	67.17
ATOM	19616	C	ILE	2926	39.406	36.224	22.827	1.00	66.38
ATOM	19617	O	ILE	2926	40.136	37.094	23.300	1.00	66.76
ATOM	19618	N	PRO	2927	39.856	34.987	22.557	1.00	65.66
ATOM	19619	CD	PRO	2927	39.075	33.857	22.023	1.00	65.23
ATOM	19620	CA	PRO	2927	41.244	34.585	22.804	1.00	64.79
ATOM	19621	CB	PRO	2927	41.198	33.073	22.613	1.00	65.30
ATOM	19622	CG	PRO	2927	40.158	32.914	21.553	1.00	65.30
ATOM	19623	C	PRO	2927	42.229	35.261	21.854	1.00	64.22
ATOM	19624	O	PRO	2927	41.838	35.812	20.824	1.00	63.39
ATOM	19625	N	LYS	2928	43.509	35.210	22.206	1.00	63.55
ATOM	19626	CA	LYS	2928	44.552	35.820	21.392	1.00	63.10
ATOM	19627	CB	LYS	2928	45.862	35.910	22.182	1.00	63.96
ATOM	19628	CG	LYS	2928	45.893	36.997	23.252	1.00	64.57
ATOM	19629	CD	LYS	2928	44.948	36.705	24.408	1.00	65.11
ATOM	19630	CE	LYS	2928	45.029	37.801	25.466	1.00	65.21
ATOM	19631	NZ	LYS	2928	44.169	37.518	26.651	1.00	64.88
ATOM	19632	C	LYS	2928	44.803	35.067	20.091	1.00	62.38
ATOM	19633	O	LYS	2928	45.363	35.622	19.145	1.00	62.12
ATOM	19634	N	PHE	2929	44.387	33.806	20.043	1.00	61.22
ATOM	19635	CA	PHE	2929	44.586	32.993	18.850	1.00	59.91
ATOM	19636	CB	PHE	2929	44.905	31.550	19.248	1.00	59.84
ATOM	19637	CG	PHE	2929	43.882	30.926	20.154	1.00	60.10
ATOM	19638	CD1	PHE	2929	42.659	30.490	19.655	1.00	60.07
ATOM	19639	CD2	PHE	2929	44.144	30.772	21.511	1.00	60.02
ATOM	19640	CE1	PHE	2929	41.711	29.907	20.494	1.00	59.46
ATOM	19641	CE2	PHE	2929	43.202	30.191	22.358	1.00	60.29
ATOM	19642	CZ	PHE	2929	41.983	29.758	21.848	1.00	59.76
ATOM	19643	C	PHE	2929	43.393	33.028	17.904	1.00	59.23
ATOM	19644	O	PHE	2929	43.370	32.321	16.897	1.00	59.32
ATOM	19645	N	ALA	2930	42.409	33.863	18.227	1.00	57.98
ATOM	19646	CA	ALA	2930	41.212	33.995	17.404	1.00	56.99
ATOM	19647	CB	ALA	2930	39.967	33.889	18.273	1.00	56.84
ATOM	19648	C	ALA	2930	41.217	35.324	16.662	1.00	56.37
ATOM	19649	O	ALA	2930	42.091	36.161	16.876	1.00	56.26
ATOM	19650	N	LYS	2931	40.236	35.517	15.788	1.00	56.19
ATOM	19651	CA	LYS	2931	40.140	36.753	15.022	1.00	56.47
ATOM	19652	CB	LYS	2931	41.140	36.734	13.862	1.00	56.43
ATOM	19653	CG	LYS	2931	41.165	38.013	13.037	1.00	56.84
ATOM	19654	CD	LYS	2931	42.212	37.935	11.939	1.00	57.32
ATOM	19655	CE	LYS	2931	42.283	39.226	11.137	1.00	57.79
ATOM	19656	NZ	LYS	2931	43.308	39.151	10.053	1.00	57.52
ATOM	19657	C	LYS	2931	38.730	36.963	14.481	1.00	56.42
ATOM	19658	O	LYS	2931	38.137	36.059	13.892	1.00	56.44
ATOM	19659	N	ASN	2932	38.202	38.165	14.687	1.00	56.03
ATOM	19660	CA	ASN	2932	36.867	38.510	14.220	1.00	55.89
ATOM	19661	CB	ASN	2932	36.274	39.617	15.095	1.00	55.63
ATOM	19662	CG	ASN	2932	34.795	39.827	14.847	1.00	55.62
ATOM	19663	OD1	ASN	2932	34.324	39.747	13.711	1.00	55.34

ATOM	19664	ND2	ASN	2932	34.053	40.111	15.911	1.00	55.48
ATOM	19665	C	ASN	2932	36.946	38.999	12.777	1.00	56.13
ATOM	19666	O	ASN	2932	37.269	40.160	12.527	1.00	56.78
ATOM	19667	N	PHE	2933	36.656	38.115	11.829	1.00	56.14
ATOM	19668	CA	PHE	2933	36.697	38.482	10.422	1.00	57.27
ATOM	19669	CB	PHE	2933	36.817	37.234	9.543	1.00	57.12
ATOM	19670	CG	PHE	2933	38.141	36.540	9.658	1.00	57.30
ATOM	19671	CD1	PHE	2933	38.472	35.829	10.807	1.00	56.85
ATOM	19672	CD2	PHE	2933	39.073	36.621	8.627	1.00	57.13
ATOM	19673	CE1	PHE	2933	39.713	35.209	10.927	1.00	57.60
ATOM	19674	CE2	PHE	2933	40.315	36.006	8.737	1.00	57.30
ATOM	19675	CZ	PHE	2933	40.637	35.299	9.889	1.00	57.81
ATOM	19676	C	PHE	2933	35.471	39.284	10.009	1.00	58.04
ATOM	19677	O	PHE	2933	35.464	39.925	8.957	1.00	58.08
ATOM	19678	N	LEU	2934	34.432	39.242	10.837	1.00	59.10
ATOM	19679	CA	LEU	2934	33.205	39.980	10.556	1.00	59.92
ATOM	19680	CB	LEU	2934	32.050	39.449	11.409	1.00	58.78
ATOM	19681	CG	LEU	2934	30.721	40.200	11.278	1.00	58.03
ATOM	19682	CD1	LEU	2934	30.222	40.120	9.844	1.00	57.10
ATOM	19683	CD2	LEU	2934	29.698	39.610	12.232	1.00	57.76
ATOM	19684	C	LEU	2934	33.426	41.454	10.864	1.00	61.04
ATOM	19685	O	LEU	2934	32.864	42.326	10.204	1.00	61.19
ATOM	19686	N	ALA	2935	34.247	41.721	11.874	1.00	62.38
ATOM	19687	CA	ALA	2935	34.552	43.086	12.274	1.00	64.22
ATOM	19688	CB	ALA	2935	35.328	43.085	13.583	1.00	63.92
ATOM	19689	C	ALA	2935	35.362	43.775	11.182	1.00	65.41
ATOM	19690	O	ALA	2935	35.204	44.972	10.935	1.00	65.96
ATOM	19691	N	GLU	2936	36.229	43.005	10.529	1.00	66.66
ATOM	19692	CA	GLU	2936	37.070	43.523	9.454	1.00	67.61
ATOM	19693	CB	GLU	2936	38.167	42.511	9.105	1.00	68.36
ATOM	19694	CG	GLU	2936	38.961	41.982	10.294	1.00	69.12
ATOM	19695	CD	GLU	2936	39.699	43.070	11.051	1.00	69.89
ATOM	19696	OE1	GLU	2936	39.034	43.903	11.703	1.00	70.02
ATOM	19697	OE2	GLU	2936	40.948	43.094	10.989	1.00	70.26
ATOM	19698	C	GLU	2936	36.216	43.788	8.217	1.00	67.80
ATOM	19699	O	GLU	2936	36.719	44.238	7.187	1.00	67.71
ATOM	19700	N	THR	2937	34.923	43.497	8.328	1.00	67.74
ATOM	19701	CA	THR	2937	33.988	43.696	7.228	1.00	67.18
ATOM	19702	CB	THR	2937	33.961	42.455	6.306	1.00	67.51
ATOM	19703	OG1	THR	2937	33.149	42.726	5.157	1.00	67.78
ATOM	19704	CG2	THR	2937	33.399	41.249	7.048	1.00	67.76
ATOM	19705	C	THR	2937	32.577	43.974	7.757	1.00	66.84
ATOM	19706	O	THR	2937	32.410	44.481	8.869	1.00	66.83
ATOM	19707	N	GLY	2938	31.565	43.650	6.958	1.00	66.24
ATOM	19708	CA	GLY	2938	30.192	43.873	7.374	1.00	65.54
ATOM	19709	C	GLY	2938	29.275	42.763	6.899	1.00	64.98
ATOM	19710	O	GLY	2938	28.054	42.842	7.043	1.00	64.61
ATOM	19711	N	ASP	2939	29.874	41.721	6.331	1.00	64.32
ATOM	19712	CA	ASP	2939	29.123	40.582	5.822	1.00	63.45
ATOM	19713	CB	ASP	2939	29.128	40.595	4.291	1.00	64.45
ATOM	19714	CG	ASP	2939	28.216	39.544	3.698	1.00	65.72
ATOM	19715	OD1	ASP	2939	28.488	38.340	3.889	1.00	66.50
ATOM	19716	OD2	ASP	2939	27.222	39.924	3.042	1.00	66.35
ATOM	19717	C	ASP	2939	29.725	39.277	6.336	1.00	62.43
ATOM	19718	O	ASP	2939	30.928	39.044	6.209	1.00	61.79
ATOM	19719	N	ILE	2940	28.878	38.433	6.920	1.00	61.10
ATOM	19720	CA	ILE	2940	29.310	37.148	7.463	1.00	59.37
ATOM	19721	CB	ILE	2940	28.105	36.342	8.007	1.00	59.30
ATOM	19722	CG2	ILE	2940	28.577	34.996	8.539	1.00	59.02
ATOM	19723	CG1	ILE	2940	27.404	37.136	9.113	1.00	59.59
ATOM	19724	CD1	ILE	2940	26.152	36.472	9.656	1.00	59.03
ATOM	19725	C	ILE	2940	30.026	36.308	6.408	1.00	58.22
ATOM	19726	O	ILE	2940	31.116	35.792	6.652	1.00	57.54
ATOM	19727	N	ARG	2941	29.407	36.171	5.240	1.00	57.25
ATOM	19728	CA	ARG	2941	29.991	35.395	4.154	1.00	56.77
ATOM	19729	CB	ARG	2941	29.033	35.348	2.963	1.00	55.80
ATOM	19730	CG	ARG	2941	27.778	34.525	3.206	1.00	53.72
ATOM	19731	CD	ARG	2941	26.838	34.590	2.013	1.00	52.37
ATOM	19732	NE	ARG	2941	25.691	33.698	2.165	1.00	51.33
ATOM	19733	CZ	ARG	2941	24.805	33.775	3.153	1.00	50.67
ATOM	19734	NH1	ARG	2941	24.927	34.706	4.089	1.00	50.47
ATOM	19735	NH2	ARG	2941	23.793	32.919	3.204	1.00	50.57
ATOM	19736	C	ARG	2941	31.328	35.986	3.721	1.00	57.51
ATOM	19737	O	ARG	2941	32.278	35.254	3.441	1.00	58.07
ATOM	19738	N	ALA	2942	31.394	37.313	3.666	1.00	57.53
ATOM	19739	CA	ALA	2942	32.618	38.001	3.275	1.00	57.14
ATOM	19740	CB	ALA	2942	32.384	39.506	3.243	1.00	57.24

ATOM	19741	C	ALA	2942	33.729	37.663	4.262	1.00	56.97
ATOM	19742	O	ALA	2942	34.882	37.475	3.874	1.00	57.28
ATOM	19743	N	ALA	2943	33.372	37.584	5.540	1.00	56.48
ATOM	19744	CA	ALA	2943	34.338	37.263	6.583	1.00	56.25
ATOM	19745	CB	ALA	2943	33.679	37.359	7.950	1.00	56.65
ATOM	19746	C	ALA	2943	34.896	35.861	6.368	1.00	56.16
ATOM	19747	O	ALA	2943	36.044	35.583	6.712	1.00	56.09
ATOM	19748	N	VAL	2944	34.077	34.984	5.792	1.00	56.16
ATOM	19749	CA	VAL	2944	34.485	33.609	5.526	1.00	55.63
ATOM	19750	CB	VAL	2944	33.279	32.735	5.106	1.00	56.09
ATOM	19751	CG1	VAL	2944	33.745	31.318	4.801	1.00	55.49
ATOM	19752	CG2	VAL	2944	32.234	32.722	6.213	1.00	55.66
ATOM	19753	C	VAL	2944	35.532	33.557	4.420	1.00	55.75
ATOM	19754	O	VAL	2944	36.568	32.909	4.569	1.00	55.47
ATOM	19755	N	ARG	2945	35.257	34.238	3.311	1.00	55.89
ATOM	19756	CA	ARG	2945	36.188	34.264	2.189	1.00	55.76
ATOM	19757	CB	ARG	2945	35.622	35.094	1.034	1.00	55.60
ATOM	19758	CG	ARG	2945	34.413	34.471	0.356	1.00	56.71
ATOM	19759	CD	ARG	2945	34.101	35.175	-0.956	1.00	57.24
ATOM	19760	NE	ARG	2945	33.775	36.585	-0.762	1.00	57.48
ATOM	19761	CZ	ARG	2945	32.653	37.024	-0.199	1.00	57.88
ATOM	19762	NH1	ARG	2945	31.740	36.163	0.228	1.00	57.99
ATOM	19763	NH2	ARG	2945	32.445	38.327	-0.061	1.00	57.70
ATOM	19764	C	ARG	2945	37.532	34.836	2.617	1.00	55.48
ATOM	19765	O	ARG	2945	38.585	34.335	2.216	1.00	55.77
ATOM	19766	N	GLN	2946	37.491	35.886	3.431	1.00	54.96
ATOM	19767	CA	GLN	2946	38.710	36.520	3.918	1.00	54.60
ATOM	19768	CB	GLN	2946	38.368	37.747	4.769	1.00	55.75
ATOM	19769	CG	GLN	2946	39.574	38.580	5.179	1.00	57.10
ATOM	19770	CD	GLN	2946	39.215	39.681	6.161	1.00	58.43
ATOM	19771	OE1	GLN	2946	38.307	40.478	5.917	1.00	59.03
ATOM	19772	NE2	GLN	2946	39.932	39.733	7.279	1.00	58.79
ATOM	19773	C	GLN	2946	39.482	35.509	4.757	1.00	53.60
ATOM	19774	O	GLN	2946	40.707	35.416	4.670	1.00	53.90
ATOM	19775	N	TYR	2947	38.752	34.754	5.571	1.00	52.23
ATOM	19776	CA	TYR	2947	39.350	33.736	6.426	1.00	50.90
ATOM	19777	CB	TYR	2947	38.267	33.086	7.291	1.00	49.81
ATOM	19778	CG	TYR	2947	38.721	31.849	8.030	1.00	48.86
ATOM	19779	CD1	TYR	2947	39.824	31.887	8.882	1.00	48.05
ATOM	19780	CE1	TYR	2947	40.240	30.751	9.570	1.00	48.01
ATOM	19781	CD2	TYR	2947	38.042	30.639	7.884	1.00	48.25
ATOM	19782	CE2	TYR	2947	38.449	29.497	8.567	1.00	47.92
ATOM	19783	CZ	TYR	2947	39.548	29.559	9.408	1.00	48.00
ATOM	19784	OH	TYR	2947	39.957	28.434	10.087	1.00	46.78
ATOM	19785	C	TYR	2947	40.045	32.679	5.574	1.00	50.61
ATOM	19786	O	TYR	2947	41.195	32.315	5.828	1.00	50.43
ATOM	19787	N	MET	2948	39.333	32.194	4.562	1.00	50.53
ATOM	19788	CA	MET	2948	39.856	31.183	3.652	1.00	50.34
ATOM	19789	CB	MET	2948	38.785	30.803	2.627	1.00	50.02
ATOM	19790	CG	MET	2948	37.518	30.204	3.220	1.00	47.76
ATOM	19791	SD	MET	2948	36.190	30.122	1.998	1.00	48.64
ATOM	19792	CE	MET	2948	36.932	29.063	0.769	1.00	48.77
ATOM	19793	C	MET	2948	41.094	31.701	2.921	1.00	51.03
ATOM	19794	O	MET	2948	42.109	31.008	2.827	1.00	51.21
ATOM	19795	N	ALA	2949	41.001	32.923	2.407	1.00	50.88
ATOM	19796	CA	ALA	2949	42.103	33.533	1.674	1.00	51.33
ATOM	19797	CB	ALA	2949	41.640	34.835	1.033	1.00	51.05
ATOM	19798	C	ALA	2949	43.328	33.789	2.547	1.00	51.80
ATOM	19799	O	ALA	2949	44.457	33.528	2.128	1.00	52.35
ATOM	19800	N	GLU	2950	43.112	34.296	3.758	1.00	52.03
ATOM	19801	CA	GLU	2950	44.222	34.583	4.662	1.00	52.73
ATOM	19802	CB	GLU	2950	43.735	35.373	5.880	1.00	52.54
ATOM	19803	CG	GLU	2950	43.593	36.864	5.622	1.00	53.18
ATOM	19804	CD	GLU	2950	43.213	37.643	6.867	1.00	53.56
ATOM	19805	OE1	GLU	2950	43.847	37.429	7.923	1.00	53.35
ATOM	19806	OE2	GLU	2950	42.287	38.478	6.787	1.00	54.33
ATOM	19807	C	GLU	2950	44.971	33.340	5.128	1.00	53.26
ATOM	19808	O	GLU	2950	46.168	33.404	5.413	1.00	53.12
ATOM	19809	N	VAL	2951	44.272	32.213	5.210	1.00	53.26
ATOM	19810	CA	VAL	2951	44.903	30.971	5.641	1.00	53.29
ATOM	19811	CB	VAL	2951	43.849	29.891	5.970	1.00	53.31
ATOM	19812	CG1	VAL	2951	44.533	28.561	6.259	1.00	53.04
ATOM	19813	CG2	VAL	2951	43.025	30.327	7.174	1.00	52.46
ATOM	19814	C	VAL	2951	45.849	30.442	4.568	1.00	53.26
ATOM	19815	O	VAL	2951	47.012	30.145	4.847	1.00	53.25
ATOM	19816	N	GLU	2952	45.348	30.328	3.342	1.00	53.64
ATOM	19817	CA	GLU	2952	46.157	29.835	2.232	1.00	54.22

ATOM	19818	CB	GLU	2952	45.328	29.793	0.947	1.00	54.72
ATOM	19819	CG	GLU	2952	46.082	29.252	-0.261	1.00	55.51
ATOM	19820	CD	GLU	2952	45.257	29.300	-1.532	1.00	56.73
ATOM	19821	OE1	GLU	2952	45.774	28.890	-2.594	1.00	57.69
ATOM	19822	OE2	GLU	2952	44.092	29.750	-1.473	1.00	56.56
ATOM	19823	C	GLU	2952	47.370	30.730	2.023	1.00	54.22
ATOM	19824	O	GLU	2952	48.430	30.266	1.608	1.00	54.53
ATOM	19825	N	SER	2953	47.202	32.015	2.318	1.00	54.17
ATOM	19826	CA	SER	2953	48.272	32.993	2.162	1.00	54.43
ATOM	19827	CB	SER	2953	47.690	34.407	2.129	1.00	54.29
ATOM	19828	OG	SER	2953	46.736	34.542	1.092	1.00	56.12
ATOM	19829	C	SER	2953	49.279	32.892	3.297	1.00	54.04
ATOM	19830	O	SER	2953	50.487	32.943	3.074	1.00	54.27
ATOM	19831	N	GLY	2954	48.771	32.750	4.516	1.00	53.77
ATOM	19832	CA	GLY	2954	49.642	32.657	5.672	1.00	53.06
ATOM	19833	C	GLY	2954	49.442	33.832	6.609	1.00	52.88
ATOM	19834	O	GLY	2954	49.975	33.854	7.719	1.00	51.86
ATOM	19835	N	VAL	2955	48.670	34.815	6.156	1.00	52.98
ATOM	19836	CA	VAL	2955	48.388	36.003	6.953	1.00	53.65
ATOM	19837	CB	VAL	2955	47.426	36.952	6.214	1.00	54.01
ATOM	19838	CG1	VAL	2955	47.201	38.208	7.039	1.00	53.59
ATOM	19839	CG2	VAL	2955	47.990	37.300	4.846	1.00	54.14
ATOM	19840	C	VAL	2955	47.756	35.606	8.281	1.00	54.39
ATOM	19841	O	VAL	2955	48.003	36.236	9.309	1.00	53.92
ATOM	19842	N	TYR	2956	46.934	34.560	8.249	1.00	54.97
ATOM	19843	CA	TYR	2956	46.271	34.070	9.451	1.00	55.91
ATOM	19844	CB	TYR	2956	44.756	34.258	9.346	1.00	56.40
ATOM	19845	CG	TYR	2956	44.014	33.837	10.595	1.00	57.63
ATOM	19846	CD1	TYR	2956	44.082	34.600	11.761	1.00	57.68
ATOM	19847	CE1	TYR	2956	43.423	34.202	12.923	1.00	58.33
ATOM	19848	CD2	TYR	2956	43.265	32.660	10.621	1.00	58.32
ATOM	19849	CE2	TYR	2956	42.603	32.251	11.778	1.00	58.41
ATOM	19850	CZ	TYR	2956	42.686	33.027	12.924	1.00	58.65
ATOM	19851	OH	TYR	2956	42.033	32.631	14.069	1.00	58.77
ATOM	19852	C	TYR	2956	46.577	32.591	9.675	1.00	56.09
ATOM	19853	O	TYR	2956	46.478	31.779	8.754	1.00	56.17
ATOM	19854	N	PRO	2957	46.962	32.223	10.908	1.00	56.16
ATOM	19855	CD	PRO	2957	47.177	30.824	11.320	1.00	56.15
ATOM	19856	CA	PRO	2957	47.109	33.126	12.052	1.00	56.59
ATOM	19857	CB	PRO	2957	47.081	32.173	13.239	1.00	56.39
ATOM	19858	CG	PRO	2957	47.791	30.980	12.698	1.00	56.47
ATOM	19859	C	PRO	2957	48.405	33.928	11.984	1.00	57.30
ATOM	19860	O	PRO	2957	49.413	33.452	11.462	1.00	57.47
ATOM	19861	N	GLY	2958	48.370	35.148	12.512	1.00	58.29
ATOM	19862	CA	GLY	2958	49.551	35.991	12.504	1.00	59.19
ATOM	19863	C	GLY	2958	50.469	35.674	13.668	1.00	59.90
ATOM	19864	O	GLY	2958	50.359	34.612	14.282	1.00	59.93
ATOM	19865	N	GLU	2959	51.376	36.595	13.975	1.00	60.38
ATOM	19866	CA	GLU	2959	52.312	36.400	15.076	1.00	60.87
ATOM	19867	CB	GLU	2959	53.457	37.413	14.988	1.00	61.40
ATOM	19868	CG	GLU	2959	54.521	37.227	16.060	1.00	61.82
ATOM	19869	CD	GLU	2959	55.285	35.926	15.903	1.00	62.12
ATOM	19870	OE1	GLU	2959	56.067	35.579	16.813	1.00	62.78
ATOM	19871	OE2	GLU	2959	55.108	35.251	14.867	1.00	62.30
ATOM	19872	C	GLU	2959	51.605	36.548	16.419	1.00	60.84
ATOM	19873	O	GLU	2959	51.933	35.855	17.384	1.00	60.59
ATOM	19874	N	GLU	2960	50.634	37.454	16.477	1.00	61.19
ATOM	19875	CA	GLU	2960	49.889	37.689	17.709	1.00	61.99
ATOM	19876	CB	GLU	2960	48.941	38.882	17.554	1.00	62.57
ATOM	19877	CG	GLU	2960	49.390	39.924	16.546	1.00	63.87
ATOM	19878	CD	GLU	2960	49.017	39.551	15.123	1.00	64.41
ATOM	19879	OE1	GLU	2960	47.804	39.475	14.828	1.00	64.20
ATOM	19880	OE2	GLU	2960	49.933	39.330	14.301	1.00	64.88
ATOM	19881	C	GLU	2960	49.077	36.450	18.052	1.00	61.91
ATOM	19882	O	GLU	2960	48.947	36.081	19.219	1.00	62.32
ATOM	19883	N	HIS	2961	48.534	35.813	17.020	1.00	61.34
ATOM	19884	CA	HIS	2961	47.723	34.615	17.196	1.00	60.73
ATOM	19885	CB	HIS	2961	46.855	34.386	15.957	1.00	59.89
ATOM	19886	CG	HIS	2961	46.116	35.607	15.504	1.00	58.97
ATOM	19887	CD2	HIS	2961	46.080	36.231	14.302	1.00	58.22
ATOM	19888	ND1	HIS	2961	45.285	36.326	16.334	1.00	58.84
ATOM	19889	CE1	HIS	2961	44.768	37.341	15.665	1.00	58.19
ATOM	19890	NE2	HIS	2961	45.233	37.306	14.430	1.00	57.99
ATOM	19891	C	HIS	2961	48.599	33.391	17.437	1.00	60.75
ATOM	19892	O	HIS	2961	48.106	32.261	17.467	1.00	60.65
ATOM	19893	N	SER	2962	49.897	33.619	17.614	1.00	60.45
ATOM	19894	CA	SER	2962	50.839	32.529	17.844	1.00	60.48

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ATOM  19895  CB   SER  2962     52.007  32.630  16.862  1.00 60.35
ATOM  19896  OG   SER  2962     51.552  32.553  15.522  1.00 59.02
ATOM  19897  C    SER  2962     51.370  32.518  19.273  1.00 60.73
ATOM  19898  O    SER  2962     51.339  33.534  19.964  1.00 60.10
ATOM  19899  N    PHE  2963     51.851  31.356  19.708  1.00 61.57
ATOM  19900  CA   PHE  2963     52.394  31.194  21.053  1.00 62.25
ATOM  19901  CB   PHE  2963     51.644  30.091  21.807  1.00 63.03
ATOM  19902  CG   PHE  2963     50.248  30.470  22.214  1.00 64.44
ATOM  19903  CD1  PHE  2963     49.278  30.750  21.256  1.00 64.83
ATOM  19904  CD2  PHE  2963     49.903  30.552  23.560  1.00 64.71
ATOM  19905  CE1  PHE  2963     47.983  31.107  21.632  1.00 64.99
ATOM  19906  CE2  PHE  2963     48.614  30.906  23.948  1.00 65.11
ATOM  19907  CZ   PHE  2963     47.651  31.185  22.981  1.00 65.30
ATOM  19908  C    PHE  2963     53.880  30.853  21.006  1.00 62.31
ATOM  19909  O    PHE  2963     54.379  30.323  20.011  1.00 61.84
ATOM  19910  N    HIS  2964     54.577  31.156  22.096  1.00 62.35
ATOM  19911  CA   HIS  2964     56.007  30.897  22.201  1.00 62.42
ATOM  19912  CB   HIS  2964     56.795  32.135  21.772  1.00 62.17
ATOM  19913  CG   HIS  2964     56.654  32.468  20.318  1.00 62.21
ATOM  19914  CD2  HIS  2964     56.082  33.526  19.696  1.00 62.06
ATOM  19915  ND1  HIS  2964     57.137  31.652  19.319  1.00 62.16
ATOM  19916  CE1  HIS  2964     56.870  32.193  18.143  1.00 62.55
ATOM  19917  NE2  HIS  2964     56.230  33.330  18.344  1.00 62.23
ATOM  19918  C    HIS  2964     56.382  30.514  23.628  1.00 62.87
ATOM  19919  O    HIS  2964     57.101  29.507  23.800  1.00 63.17
ATOM  19920  OXT  HIS  2964     55.958  31.232  24.558  1.00 63.88
ATOM  19921  C1   KPL  2965     38.359  24.260  19.395  1.00 44.32
ATOM  19922  C2   KPL  2965     38.509  22.957  18.586  1.00 44.37
ATOM  19923  C3   KPL  2965     38.070  23.219  17.138  1.00 44.11
ATOM  19924  C4   KPL  2965     39.994  22.528  18.576  1.00 44.41
ATOM  19925  O1   KPL  2965     40.466  22.273  19.906  1.00 46.59
ATOM  19926  C5   KPL  2965     37.616  21.846  19.201  1.00 44.46
ATOM  19927  O2   KPL  2965     38.120  20.811  19.596  1.00 45.29
ATOM  19928  C6   KPL  2965     36.112  22.005  19.331  1.00 44.39
ATOM  19929  O3   KPL  2965     35.550  23.016  18.951  1.00 44.59
ATOM  19930  O4   KPL  2965     35.382  21.012  19.874  1.00 43.64
ATOM  19931  MG+2 MG2  3001      3.994  24.216  47.085  1.00 41.37
ATOM  19932  MG+2 MG2  3002      6.567  28.508  15.105  1.00 41.66
ATOM  19933  MG+2 MG2  3003     -3.352   1.040   0.322  1.00 26.64
ATOM  19934  MG+2 MG2  3004    -12.375 -19.811  23.437  1.00 24.57
ATOM  19935  MG+2 MG2  3005     -7.605  -5.894  52.220  1.00 34.50
ATOM  19936  MG+2 MG2  3006     27.460  -4.705   0.894  1.00 30.26
ATOM  19937  MG+2 MG2  3007     17.331 -30.253  18.884  1.00 32.29
ATOM  19938  MG+2 MG2  3008     19.663 -21.554  49.976  1.00 25.48
ATOM  19939  MG+2 MG2  3009     31.302   8.730  51.343  1.00 41.34
ATOM  19940  MG+2 MG2  3010     36.277  19.579  21.091  1.00 52.60
ATOM  19941  OH2  WAT  3011     31.424 -16.107  39.470  1.00 10.76
ATOM  19942  OH2  WAT  3012     12.698 -18.611  32.844  1.00 10.49
ATOM  19943  OH2  WAT  3013     -8.246   1.949  11.544  1.00 13.19
ATOM  19944  OH2  WAT  3014     27.207 -31.545  22.513  1.00 13.62
ATOM  19945  OH2  WAT  3015     25.517 -21.182  20.257  1.00 10.14
ATOM  19946  OH2  WAT  3016     -7.674  17.525  37.246  1.00 13.74
ATOM  19947  OH2  WAT  3017     -2.159  -6.488  21.338  1.00 15.76
ATOM  19948  OH2  WAT  3018      0.835  -9.327  15.447  1.00 11.52
ATOM  19949  OH2  WAT  3019      3.764 -32.000  22.104  1.00 11.84
ATOM  19950  OH2  WAT  3020     37.123  -1.512  39.521  1.00 16.58
ATOM  19951  OH2  WAT  3021     17.933 -46.120  14.538  1.00 11.66
ATOM  19952  OH2  WAT  3022     10.775 -17.843  17.172  1.00 15.20
ATOM  19953  OH2  WAT  3023     15.784 -11.897  13.470  1.00 11.48
ATOM  19954  OH2  WAT  3024    -14.336  22.570 -15.394  1.00 13.53
ATOM  19955  OH2  WAT  3025     12.577  -9.564   9.580  1.00 14.31
ATOM  19956  OH2  WAT  3026    -23.367  12.451   2.123  1.00 20.69
ATOM  19957  OH2  WAT  3027      0.767 -19.320  30.486  1.00 16.05
ATOM  19958  OH2  WAT  3028     -0.982  -8.203  33.657  1.00 15.14
ATOM  19959  OH2  WAT  3029      5.689   5.614  45.308  1.00 11.24
ATOM  19960  OH2  WAT  3030      4.143   4.088  43.662  1.00 15.33
ATOM  19961  OH2  WAT  3031    -16.843  -2.595  47.938  1.00 11.00
ATOM  19962  OH2  WAT  3032     12.241  13.450  38.158  1.00 23.70
ATOM  19963  OH2  WAT  3033     -5.960 -12.449  28.625  1.00 14.48
ATOM  19964  OH2  WAT  3034     16.382 -12.732  16.031  1.00 14.41
ATOM  19965  OH2  WAT  3035     33.192 -17.361  37.635  1.00 14.11
ATOM  19966  OH2  WAT  3036     29.576  -3.425  53.736  1.00 16.58
ATOM  19967  OH2  WAT  3037     25.016 -14.473  37.183  1.00 18.91
ATOM  19968  OH2  WAT  3038     10.453   7.434  47.450  1.00 13.74
ATOM  19969  OH2  WAT  3039      0.953 -32.769   9.383  1.00 15.20
ATOM  19970  OH2  WAT  3040     -7.328   8.718 -18.137  1.00 18.80
ATOM  19971  OH2  WAT  3041     -8.835   2.730  43.501  1.00 10.87
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ATOM  19972  OH2 WAT  3042    -1.580 -10.794  33.592  1.00 12.62
ATOM  19973  OH2 WAT  3043   -12.914  -8.541  27.617  1.00 12.73
ATOM  19974  OH2 WAT  3044    21.710  13.409  25.403  1.00 31.57
ATOM  19975  OH2 WAT  3045     7.683 -20.302  30.445  1.00 10.85
ATOM  19976  OH2 WAT  3046     1.102 -30.671  18.260  1.00 15.68
ATOM  19977  OH2 WAT  3047    28.173   7.798  31.821  1.00 20.07
ATOM  19978  OH2 WAT  3048    -1.179 -14.949  31.883  1.00 13.42
ATOM  19979  OH2 WAT  3049    13.221  14.116  19.297  1.00 20.69
ATOM  19980  OH2 WAT  3050    -2.044  20.189  37.466  1.00 16.68
ATOM  19981  OH2 WAT  3051    17.876 -14.432  39.307  1.00 16.30
ATOM  19982  OH2 WAT  3052    -0.744 -30.549  20.671  1.00 17.77
ATOM  19983  OH2 WAT  3053    35.481 -39.258  29.142  1.00 12.21
ATOM  19984  OH2 WAT  3054    -9.507   4.070 -12.790  1.00 16.79
ATOM  19985  OH2 WAT  3055    31.604  -1.451  46.191  1.00 14.27
ATOM  19986  OH2 WAT  3056   -14.406   5.407  38.561  1.00 16.53
ATOM  19987  OH2 WAT  3057    -0.928 -11.952  36.038  1.00 12.23
ATOM  19988  OH2 WAT  3058     0.468 -17.148  54.501  1.00 17.45
ATOM  19989  OH2 WAT  3059     5.125 -36.602  35.570  1.00 20.20
ATOM  19990  OH2 WAT  3060     0.620 -51.357  23.066  1.00 14.88
ATOM  19991  OH2 WAT  3061    17.818 -20.565  43.493  1.00 14.36
ATOM  19992  OH2 WAT  3062    23.320   7.615  14.657  1.00 12.79
ATOM  19993  OH2 WAT  3063   -13.311   2.901  39.033  1.00 16.11
ATOM  19994  OH2 WAT  3064    32.528 -20.167  23.589  1.00 13.88
ATOM  19995  OH2 WAT  3065    13.191  -4.951  48.336  1.00 19.12
ATOM  19996  OH2 WAT  3066   -11.736   7.247   3.147  1.00 13.94
ATOM  19997  OH2 WAT  3067    32.586  -0.717  43.888  1.00 14.86
ATOM  19998  OH2 WAT  3068    11.327  19.214  30.461  1.00 15.85
ATOM  19999  OH2 WAT  3069    19.105 -45.037  17.671  1.00 11.69
ATOM  20000  OH2 WAT  3070    -9.957  -7.454   6.721  1.00 17.25
ATOM  20001  OH2 WAT  3071     9.085 -16.151  57.247  1.00 14.59
ATOM  20002  OH2 WAT  3072    39.426   3.322  24.588  1.00 19.14
ATOM  20003  OH2 WAT  3073     3.530   9.016  39.444  1.00 15.75
ATOM  20004  OH2 WAT  3074   -10.708  15.943 -14.582  1.00 14.94
ATOM  20005  OH2 WAT  3075    -0.027 -17.054  29.261  1.00 12.27
ATOM  20006  OH2 WAT  3076    14.927  -5.859  -4.822  1.00 16.81
ATOM  20007  OH2 WAT  3077    -6.247  19.997  21.778  1.00 16.82
ATOM  20008  OH2 WAT  3078    23.194  -3.748  41.708  1.00 13.63
ATOM  20009  OH2 WAT  3079     3.044 -14.551  15.690  1.00 11.83
ATOM  20010  OH2 WAT  3080    15.856 -44.437  15.495  1.00 16.34
ATOM  20011  OH2 WAT  3081     2.658  -6.744  11.642  1.00 13.95
ATOM  20012  OH2 WAT  3082    18.097  -3.425  45.902  1.00 14.60
ATOM  20013  OH2 WAT  3083    17.808 -10.614  17.279  1.00 20.73
ATOM  20014  OH2 WAT  3084    17.717 -23.621  16.919  1.00 14.50
ATOM  20015  OH2 WAT  3085    20.450 -28.027  39.405  1.00 20.21
ATOM  20016  OH2 WAT  3086   -16.370   8.639  40.975  1.00 19.28
ATOM  20017  OH2 WAT  3087    25.222  -0.313  11.241  1.00 15.89
ATOM  20018  OH2 WAT  3088    11.033  -3.025  -5.467  1.00 16.78
ATOM  20019  OH2 WAT  3089    -2.490  -3.684  17.486  1.00 14.21
ATOM  20020  OH2 WAT  3090    22.173 -49.823  28.580  1.00 17.88
ATOM  20021  OH2 WAT  3091    -8.999 -16.320  27.976  1.00 15.29
ATOM  20022  OH2 WAT  3092   -19.387  -2.818  23.319  1.00 14.53
ATOM  20023  OH2 WAT  3093    35.100  -8.958  15.354  1.00 16.00
ATOM  20024  OH2 WAT  3094   -10.894   6.982  14.192  1.00 14.83
ATOM  20025  OH2 WAT  3095    38.364 -11.130  14.395  1.00 14.78
ATOM  20026  OH2 WAT  3096   -14.355   9.093  12.720  1.00 16.02
ATOM  20027  OH2 WAT  3097    -2.640  -2.142   6.218  1.00 14.25
ATOM  20028  OH2 WAT  3098    14.236 -16.887  34.025  1.00 14.37
ATOM  20029  OH2 WAT  3099    -6.286 -20.729  35.017  1.00 17.92
ATOM  20030  OH2 WAT  3100     5.618 -54.564  19.599  1.00 18.87
ATOM  20031  OH2 WAT  3101    24.798  12.998  34.734  1.00 20.61
ATOM  20032  OH2 WAT  3102    18.157 -48.389  22.944  1.00 18.26
ATOM  20033  OH2 WAT  3103     3.448 -22.348  28.656  1.00 16.83
ATOM  20034  OH2 WAT  3104    37.310  16.574  60.707  1.00 13.63
ATOM  20035  OH2 WAT  3105     7.399  10.930  14.456  1.00 15.32
ATOM  20036  OH2 WAT  3106    -4.065  -6.934  32.716  1.00 13.85
ATOM  20037  OH2 WAT  3107    26.681  -0.650   6.361  1.00 16.84
ATOM  20038  OH2 WAT  3108     2.621 -29.273  20.371  1.00 18.02
ATOM  20039  OH2 WAT  3109    -8.257   9.695 -15.506  1.00 17.18
ATOM  20040  OH2 WAT  3110    -5.408   3.177 -13.054  1.00 16.87
ATOM  20041  OH2 WAT  3111   -14.226 -15.880  35.035  1.00 19.49
ATOM  20042  OH2 WAT  3112     8.844 -18.039  14.940  1.00 13.32
ATOM  20043  OH2 WAT  3113    10.416 -45.629   8.580  1.00 19.28
ATOM  20044  OH2 WAT  3114    24.321 -21.344  39.443  1.00 14.51
ATOM  20045  OH2 WAT  3115    32.620  -1.644  10.966  1.00 18.64
ATOM  20046  OH2 WAT  3116    21.077  -7.973  16.352  1.00 16.09
ATOM  20047  OH2 WAT  3117    11.416   8.982  43.352  1.00 19.27
ATOM  20048  OH2 WAT  3118    35.781 -10.327   4.606  1.00 17.92
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ATOM  20049  OH2 WAT  3119     11.474    7.062    8.572   1.00 18.56
ATOM  20050  OH2 WAT  3120     17.899  -18.896   18.746   1.00 14.76
ATOM  20051  OH2 WAT  3121      9.407    1.445   -5.210   1.00 17.30
ATOM  20052  OH2 WAT  3122     11.378  -25.783   40.687   1.00 19.55
ATOM  20053  OH2 WAT  3123     30.129  -21.017   24.522   1.00 15.05
ATOM  20054  OH2 WAT  3124     15.046  -43.858   18.014   1.00 11.77
ATOM  20055  OH2 WAT  3125     -9.121    2.705   47.977   1.00 17.81
ATOM  20056  OH2 WAT  3126     34.332  -14.474   60.657   1.00 24.94
ATOM  20057  OH2 WAT  3127     -3.766    0.667   55.823   1.00 21.51
ATOM  20058  OH2 WAT  3128     33.157  -10.971   35.543   1.00 17.96
ATOM  20059  OH2 WAT  3129     20.042  -48.084   29.393   1.00 17.39
ATOM  20060  OH2 WAT  3130      7.739  -10.910   -9.034   1.00 16.41
ATOM  20061  OH2 WAT  3131     -2.901  -28.128   17.100   1.00 11.64
ATOM  20062  OH2 WAT  3132      8.775  -17.442   26.955   1.00 15.53
ATOM  20063  OH2 WAT  3133     10.635  -14.815    5.424   1.00 17.26
ATOM  20064  OH2 WAT  3134     -1.407   15.539   35.202   1.00 21.03
ATOM  20065  OH2 WAT  3135     22.262   -3.590   54.476   1.00 17.12
ATOM  20066  OH2 WAT  3136    -13.401  -21.508   25.158   1.00 27.63
ATOM  20067  OH2 WAT  3137      5.128   -2.847   47.443   1.00 12.45
ATOM  20068  OH2 WAT  3138    -15.619   -3.485   24.661   1.00  9.97
ATOM  20069  OH2 WAT  3139     -2.531  -40.976   12.328   1.00 13.52
ATOM  20070  OH2 WAT  3140     -1.909   -4.892   36.246   1.00 16.91
ATOM  20071  OH2 WAT  3141    -19.604   14.972    6.233   1.00 20.13
ATOM  20072  OH2 WAT  3142     -6.017  -42.085   21.509   1.00 16.39
ATOM  20073  OH2 WAT  3143     -7.945   16.282  -13.491   1.00 17.83
ATOM  20074  OH2 WAT  3144     30.702   28.827   44.434   1.00 22.57
ATOM  20075  OH2 WAT  3145     -9.294   18.400   35.274   1.00 15.61
ATOM  20076  OH2 WAT  3146     30.373  -21.453   48.978   1.00 13.66
ATOM  20077  OH2 WAT  3147    -11.335   18.904   38.629   1.00 18.20
ATOM  20078  OH2 WAT  3148      5.189   16.665   30.863   1.00 16.04
ATOM  20079  OH2 WAT  3149      8.219  -17.924   40.764   1.00 16.89
ATOM  20080  OH2 WAT  3150     41.387   -1.649   40.145   1.00 18.07
ATOM  20081  OH2 WAT  3151     -3.245  -39.921    9.833   1.00 18.23
ATOM  20082  OH2 WAT  3152      8.198    9.770   11.939   1.00 15.65
ATOM  20083  OH2 WAT  3153    -13.314    6.554   15.618   1.00 21.95
ATOM  20084  OH2 WAT  3154     11.910  -17.540   37.668   1.00 13.80
ATOM  20085  OH2 WAT  3155    -20.114  -12.582   21.243   1.00 16.42
ATOM  20086  OH2 WAT  3156     -1.281  -11.060    5.278   1.00 17.26
ATOM  20087  OH2 WAT  3157    -17.431    3.089   39.729   1.00 12.26
ATOM  20088  OH2 WAT  3158     -3.548  -35.710   27.746   1.00 16.68
ATOM  20089  OH2 WAT  3159    -17.120    5.018   37.848   1.00 16.94
ATOM  20090  OH2 WAT  3160     13.477   -2.627   54.843   1.00 18.64
ATOM  20091  OH2 WAT  3161     -5.243  -43.014   23.849   1.00 19.60
ATOM  20092  OH2 WAT  3162    -13.199  -10.151   29.903   1.00 15.06
ATOM  20093  OH2 WAT  3163      2.054  -26.977   54.316   1.00 21.37
ATOM  20094  OH2 WAT  3164     23.993  -29.599   61.802   1.00 20.85
ATOM  20095  OH2 WAT  3165     24.933    1.982   44.938   1.00 17.95
ATOM  20096  OH2 WAT  3166     16.321  -50.335   21.944   1.00 14.95
ATOM  20097  OH2 WAT  3167      4.185  -10.137   40.452   1.00 18.49
ATOM  20098  OH2 WAT  3168     -6.542    2.530   38.971   1.00 18.82
ATOM  20099  OH2 WAT  3169     13.980   -5.493   11.385   1.00 15.38
ATOM  20100  OH2 WAT  3170     23.236    4.920   15.059   1.00 16.06
ATOM  20101  OH2 WAT  3171    -18.040   24.374   52.309   1.00 20.78
ATOM  20102  OH2 WAT  3172     37.479   14.626   63.159   1.00 18.93
ATOM  20103  OH2 WAT  3173     40.548    4.987   47.799   1.00 20.00
ATOM  20104  OH2 WAT  3174     -7.860    3.921   45.943   1.00 16.64
ATOM  20105  OH2 WAT  3175      4.737  -16.653   43.656   1.00 23.24
ATOM  20106  OH2 WAT  3176     19.671   -2.177   44.183   1.00 15.91
ATOM  20107  OH2 WAT  3177      9.864   -0.921    9.302   1.00 19.67
ATOM  20108  OH2 WAT  3178     25.798  -18.855   39.813   1.00 15.04
ATOM  20109  OH2 WAT  3179     -3.409   -1.361   49.300   1.00 15.09
ATOM  20110  OH2 WAT  3180      5.816   22.238   40.960   1.00 19.83
ATOM  20111  OH2 WAT  3181     21.304   15.686   38.364   1.00 19.23
ATOM  20112  OH2 WAT  3182     33.264  -12.303   53.961   1.00 22.43
ATOM  20113  OH2 WAT  3183    -19.721  -30.018   18.220   1.00 17.02
ATOM  20114  OH2 WAT  3184     30.616   19.768   70.046   1.00 18.96
ATOM  20115  OH2 WAT  3185     13.397   11.894    3.881   1.00 22.84
ATOM  20116  OH2 WAT  3186     21.307    4.413   11.054   1.00 18.87
ATOM  20117  OH2 WAT  3187    -14.018   16.237  -13.520   1.00 13.75
ATOM  20118  OH2 WAT  3188     27.233    3.845   48.990   1.00 15.76
ATOM  20119  OH2 WAT  3189     18.322  -35.199   37.473   1.00 21.41
ATOM  20120  OH2 WAT  3190      3.346   10.973   16.658   1.00 17.09
ATOM  20121  OH2 WAT  3191     -1.268    0.118   45.115   1.00 20.12
ATOM  20122  OH2 WAT  3192      8.866  -56.007   22.359   1.00 22.50
ATOM  20123  OH2 WAT  3193      4.755   11.704  -21.103   1.00 21.21
ATOM  20124  OH2 WAT  3194     29.496    7.747    5.130   1.00 24.25
ATOM  20125  OH2 WAT  3195      6.916   -2.587   12.344   1.00 16.98
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ATOM   20126  OH2 WAT  3196      6.422   15.829   26.439  1.00 19.29
ATOM   20127  OH2 WAT  3197    -13.894  -11.050   64.371  1.00 18.77
ATOM   20128  OH2 WAT  3198      3.453  -13.631   20.195  1.00 16.50
ATOM   20129  OH2 WAT  3199     13.511  -27.216   36.881  1.00 18.17
ATOM   20130  OH2 WAT  3200     10.479  -16.462   40.801  1.00 14.13
ATOM   20131  OH2 WAT  3201     19.084    1.615   46.456  1.00 19.77
ATOM   20132  OH2 WAT  3202     13.651  -21.751    8.937  1.00 19.12
ATOM   20133  OH2 WAT  3203     30.258   -1.193   39.421  1.00 23.25
ATOM   20134  OH2 WAT  3204     22.221  -46.203   12.674  1.00 18.08
ATOM   20135  OH2 WAT  3205    -10.806   20.587   22.314  1.00 22.59
ATOM   20136  OH2 WAT  3206     25.446    8.006    4.362  1.00 22.71
ATOM   20137  OH2 WAT  3207     -1.437  -43.569   11.596  1.00 14.68
ATOM   20138  OH2 WAT  3208      6.165   17.099   16.294  1.00 19.35
ATOM   20139  OH2 WAT  3209      0.456   -5.728   18.027  1.00 16.11
ATOM   20140  OH2 WAT  3210     17.554  -15.937   28.233  1.00 15.55
ATOM   20141  OH2 WAT  3211      2.388  -14.201   39.957  1.00 16.30
ATOM   20142  OH2 WAT  3212     -8.445  -43.392   21.151  1.00 15.83
ATOM   20143  OH2 WAT  3213     -1.149   -2.138   11.071  1.00 16.20
ATOM   20144  OH2 WAT  3214     16.006  -18.966    9.491  1.00 22.11
ATOM   20145  OH2 WAT  3215     40.917   14.465   61.223  1.00 17.97
ATOM   20146  OH2 WAT  3216     20.418   -7.448   40.411  1.00 18.22
ATOM   20147  OH2 WAT  3217      7.210    6.558  -23.993  1.00 22.59
ATOM   20148  OH2 WAT  3218     13.270   -1.290   -5.622  1.00 17.55
ATOM   20149  OH2 WAT  3219     16.193   -6.804   65.086  1.00 23.17
ATOM   20150  OH2 WAT  3220      1.345    6.829   53.690  1.00 19.22
ATOM   20151  OH2 WAT  3221    -24.487  -28.861   12.302  1.00 24.58
ATOM   20152  OH2 WAT  3222     -5.861    6.465   53.062  1.00 22.85
ATOM   20153  OH2 WAT  3223      2.196  -17.385    9.566  1.00 14.82
ATOM   20154  OH2 WAT  3224      5.907   18.688   37.560  1.00 23.71
ATOM   20155  OH2 WAT  3225      9.404   -6.985  -17.364  1.00 18.51
ATOM   20156  OH2 WAT  3226    -19.508   18.345   -4.134  1.00 18.87
ATOM   20157  OH2 WAT  3227     43.927   19.766   59.453  1.00 22.41
ATOM   20158  OH2 WAT  3228     10.197    3.381   10.668  1.00 16.51
ATOM   20159  OH2 WAT  3229    -14.378   18.764   53.775  1.00 20.79
ATOM   20160  OH2 WAT  3230    -20.438  -16.179   61.040  1.00 22.89
ATOM   20161  OH2 WAT  3231     30.282  -36.634   32.910  1.00 15.84
ATOM   20162  OH2 WAT  3232     39.788   13.875   64.578  1.00 17.48
ATOM   20163  OH2 WAT  3233    -21.813  -14.345    7.149  1.00 19.96
ATOM   20164  OH2 WAT  3234      3.481  -16.263   23.755  1.00 24.36
ATOM   20165  OH2 WAT  3235     32.740    7.544   50.333  1.00 19.77
ATOM   20166  OH2 WAT  3236    -16.527  -40.590   22.042  1.00 15.97
ATOM   20167  OH2 WAT  3237    -20.321   -1.940   29.261  1.00 17.79
ATOM   20168  OH2 WAT  3238      6.910  -16.348   54.593  1.00 23.74
ATOM   20169  OH2 WAT  3239     32.211   -4.106   12.342  1.00 12.74
ATOM   20170  OH2 WAT  3240      6.833  -38.308   33.861  1.00 27.01
ATOM   20171  OH2 WAT  3241     -5.435    3.091   15.587  1.00 25.68
ATOM   20172  OH2 WAT  3242      5.162   -5.435    9.145  1.00 15.66
ATOM   20173  OH2 WAT  3243    -12.976   18.875    1.055  1.00 26.56
ATOM   20174  OH2 WAT  3244      4.941  -50.548   27.523  1.00 18.25
ATOM   20175  OH2 WAT  3245     23.502    4.496   17.712  1.00 21.76
ATOM   20176  OH2 WAT  3246     29.781   -8.409  -12.106  1.00 22.34
ATOM   20177  OH2 WAT  3247     16.179   20.627   27.934  1.00 17.27
ATOM   20178  OH2 WAT  3248     25.630    6.081   35.873  1.00 24.47
ATOM   20179  OH2 WAT  3249     19.075    2.823    8.867  1.00 17.88
ATOM   20180  OH2 WAT  3250     24.463   -1.978   55.349  1.00 19.50
ATOM   20181  OH2 WAT  3251      6.006   -7.737    8.134  1.00 18.83
ATOM   20182  OH2 WAT  3252     24.297  -22.682   41.765  1.00 22.36
ATOM   20183  OH2 WAT  3253    -14.877    8.810   15.278  1.00 19.04
ATOM   20184  OH2 WAT  3254      6.808   -2.819   49.732  1.00 18.14
ATOM   20185  OH2 WAT  3255     26.166    5.603   20.868  1.00 21.17
ATOM   20186  OH2 WAT  3256      4.305  -15.545   56.992  1.00 16.97
ATOM   20187  OH2 WAT  3257     13.421  -15.839   15.404  1.00 19.34
ATOM   20188  OH2 WAT  3258    -12.696  -19.398   26.900  1.00 26.15
ATOM   20189  OH2 WAT  3259      5.047  -18.352   55.566  1.00 20.95
ATOM   20190  OH2 WAT  3260    -21.140  -30.966   20.114  1.00 22.15
ATOM   20191  OH2 WAT  3261     -0.778   32.093   65.599  1.00 22.89
ATOM   20192  OH2 WAT  3262     -4.568  -12.190    8.019  1.00 19.08
ATOM   20193  OH2 WAT  3263     -9.797    1.121  -14.744  1.00 15.93
ATOM   20194  OH2 WAT  3264     -6.689   23.825   46.121  1.00 15.64
ATOM   20195  OH2 WAT  3265     14.061   12.604   42.176  1.00 31.75
ATOM   20196  OH2 WAT  3266     -0.527   -0.897   42.399  1.00 20.09
ATOM   20197  OH2 WAT  3267     -0.194   33.276   58.037  1.00 23.96
ATOM   20198  OH2 WAT  3268     24.901  -17.073   22.925  1.00 20.92
ATOM   20199  OH2 WAT  3269     41.330   -8.601   15.013  1.00 23.33
ATOM   20200  OH2 WAT  3270      4.620   -8.727   -6.543  1.00 24.77
ATOM   20201  OH2 WAT  3271     35.246  -17.451   41.068  1.00 18.93
ATOM   20202  OH2 WAT  3272     25.285   11.482   32.566  1.00 19.14
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ATOM  20203  OH2 WAT  3273    41.753 -19.624  48.472  1.00 23.10
ATOM  20204  OH2 WAT  3274     4.615   0.859  46.531  1.00 16.54
ATOM  20205  OH2 WAT  3275    31.542 -15.777  28.303  1.00 20.38
ATOM  20206  OH2 WAT  3276    19.527  11.849  39.254  1.00 15.70
ATOM  20207  OH2 WAT  3277    33.147 -23.760  25.248  1.00 16.58
ATOM  20208  OH2 WAT  3278    -5.916 -49.095  13.770  1.00 29.58
ATOM  20209  OH2 WAT  3279    23.794 -15.430  33.966  1.00 21.14
ATOM  20210  OH2 WAT  3280   -14.122   0.241 -14.020  1.00 21.60
ATOM  20211  OH2 WAT  3281   -31.126  -7.465  48.968  1.00 18.37
ATOM  20212  OH2 WAT  3282    33.182   4.867  26.769  1.00 29.67
ATOM  20213  OH2 WAT  3283    24.781   8.897  32.613  1.00 23.60
ATOM  20214  OH2 WAT  3284    37.324 -32.782  27.936  1.00 20.55
ATOM  20215  OH2 WAT  3285    36.703  -2.932  24.810  1.00 20.31
ATOM  20216  OH2 WAT  3286    16.737   6.043 -10.203  1.00 14.77
ATOM  20217  OH2 WAT  3287    42.281  10.193  65.227  1.00 20.86
ATOM  20218  OH2 WAT  3288   -24.643 -24.852   6.883  1.00 22.27
ATOM  20219  OH2 WAT  3289     3.427  33.777  58.006  1.00 17.87
ATOM  20220  OH2 WAT  3290    26.392   2.408  17.399  1.00 19.04
ATOM  20221  OH2 WAT  3291   -18.654  -5.950  66.016  1.00 23.24
ATOM  20222  OH2 WAT  3292   -13.093 -15.210  22.791  1.00 20.23
ATOM  20223  OH2 WAT  3293     9.173  -6.311  51.088  1.00 24.64
ATOM  20224  OH2 WAT  3294    38.564 -37.037  23.715  1.00 17.22
ATOM  20225  OH2 WAT  3295   -23.611 -28.491  18.445  1.00 21.94
ATOM  20226  OH2 WAT  3296    43.474 -20.767   2.623  1.00 21.92
ATOM  20227  OH2 WAT  3297     5.370 -10.917  64.991  1.00 20.49
ATOM  20228  OH2 WAT  3298    21.104  12.701  14.311  1.00 20.74
ATOM  20229  OH2 WAT  3299    -8.121  27.589  65.671  1.00 30.46
ATOM  20230  OH2 WAT  3300    17.972   5.158   7.455  1.00 16.91
ATOM  20231  OH2 WAT  3301    10.494  -0.984  -3.411  1.00 21.18
ATOM  20232  OH2 WAT  3302     4.032  42.243  10.424  1.00 30.91
ATOM  20233  OH2 WAT  3303    24.441 -27.550  68.904  1.00 18.25
ATOM  20234  OH2 WAT  3304     6.219  21.783  14.079  1.00 25.97
ATOM  20235  OH2 WAT  3305    23.593  -1.831  13.125  1.00 19.74
ATOM  20236  OH2 WAT  3306   -17.736   1.565  54.302  1.00 19.29
ATOM  20237  OH2 WAT  3307    13.850  -2.899  -3.293  1.00 22.15
ATOM  20238  OH2 WAT  3308    34.332 -43.289  29.457  1.00 20.15
ATOM  20239  OH2 WAT  3309    -5.197  -6.814   1.773  1.00 19.55
ATOM  20240  OH2 WAT  3310   -12.090  18.072  36.228  1.00 19.58
ATOM  20241  OH2 WAT  3311    17.354  10.254  43.120  1.00 34.77
ATOM  20242  OH2 WAT  3312    -3.313  11.757  19.670  1.00 26.41
ATOM  20243  OH2 WAT  3313     8.528 -13.751  41.287  1.00 21.05
ATOM  20244  OH2 WAT  3314    32.008 -20.113   6.850  1.00 25.55
ATOM  20245  OH2 WAT  3315    13.281  16.160  15.117  1.00 24.88
ATOM  20246  OH2 WAT  3316    28.691   9.379   7.117  1.00 20.59
ATOM  20247  OH2 WAT  3317    23.789  -6.461  61.180  1.00 26.68
ATOM  20248  OH2 WAT  3318     1.515  36.096  58.072  1.00 18.91
ATOM  20249  OH2 WAT  3319    48.872  11.459  42.531  1.00 27.53
ATOM  20250  OH2 WAT  3320     5.225 -25.223  34.596  1.00 14.92
ATOM  20251  OH2 WAT  3321    37.106 -22.432   3.847  1.00 17.63
ATOM  20252  OH2 WAT  3322    -9.345  -4.853  27.183  1.00 24.67
ATOM  20253  OH2 WAT  3323    34.721 -21.213  36.495  1.00 21.39
ATOM  20254  OH2 WAT  3324    32.652 -14.927 -13.607  1.00 25.32
ATOM  20255  OH2 WAT  3325   -13.339  21.021  -8.922  1.00 22.80
ATOM  20256  OH2 WAT  3326    -3.296  -1.036  16.162  1.00 24.45
ATOM  20257  OH2 WAT  3327     9.522 -32.401  16.459  1.00 23.66
ATOM  20258  OH2 WAT  3328    18.151  15.055  63.606  1.00 19.05
ATOM  20259  OH2 WAT  3329     6.249 -47.125  10.644  1.00 21.08
ATOM  20260  OH2 WAT  3330    -9.192  11.917  33.840  1.00 20.79
ATOM  20261  OH2 WAT  3331     4.631 -19.143  15.726  1.00 20.59
ATOM  20262  OH2 WAT  3332    18.911  18.491  41.568  1.00 24.07
ATOM  20263  OH2 WAT  3333   -17.813  22.262  45.797  1.00 26.58
ATOM  20264  OH2 WAT  3334    10.713 -28.271  37.324  1.00 25.49
ATOM  20265  OH2 WAT  3335    29.350  -5.186   2.361  1.00 31.20
ATOM  20266  OH2 WAT  3336     7.196  -5.221  46.352  1.00 22.56
ATOM  20267  OH2 WAT  3337    54.614  10.503  48.370  1.00 21.87
ATOM  20268  OH2 WAT  3338    12.377 -24.993  37.751  1.00 21.71
ATOM  20269  OH2 WAT  3339    16.863   5.321  48.931  1.00 23.14
ATOM  20270  OH2 WAT  3340    -8.724  19.145  20.888  1.00 19.11
ATOM  20271  OH2 WAT  3341    13.381 -19.714  -4.203  1.00 16.96
ATOM  20272  OH2 WAT  3342    11.141  15.500  -6.398  1.00 25.52
ATOM  20273  OH2 WAT  3343    -0.771  12.885  18.816  1.00 31.48
ATOM  20274  OH2 WAT  3344   -16.965   4.474  14.900  1.00 22.48
ATOM  20275  OH2 WAT  3345    19.464  21.926  68.546  1.00 24.61
ATOM  20276  OH2 WAT  3346    -8.665  -0.567  10.532  1.00 17.50
ATOM  20277  OH2 WAT  3347    19.548  -3.441  41.810  1.00 18.14
ATOM  20278  OH2 WAT  3348     3.984   5.093  41.179  1.00 19.65
ATOM  20279  OH2 WAT  3349    34.101   4.713   6.355  1.00 26.04
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ATOM   20280  OH2 WAT  3350      9.510 -54.905  26.309  1.00 22.92
ATOM   20281  OH2 WAT  3351      2.738   2.375  54.788  1.00 21.38
ATOM   20282  OH2 WAT  3352     38.200  -3.877  39.235  1.00 17.67
ATOM   20283  OH2 WAT  3353     10.728  14.126  13.818  1.00 21.22
ATOM   20284  OH2 WAT  3354     -1.810  -3.501 -10.761  1.00 32.21
ATOM   20285  OH2 WAT  3355     23.131  20.084  52.484  1.00 21.25
ATOM   20286  OH2 WAT  3356     13.275  37.450  61.583  1.00 23.72
ATOM   20287  OH2 WAT  3357     14.902 -27.854  39.228  1.00 17.88
ATOM   20288  OH2 WAT  3358     17.196   0.708 -19.731  1.00 22.56
ATOM   20289  OH2 WAT  3359     12.894  27.941  72.812  1.00 22.10
ATOM   20290  OH2 WAT  3360     51.803  18.337  55.429  1.00 23.28
ATOM   20291  OH2 WAT  3361     23.951  22.297  38.321  1.00 19.39
ATOM   20292  OH2 WAT  3362     28.231  10.502  25.782  1.00 29.33
ATOM   20293  OH2 WAT  3363    -19.632 -10.100  40.923  1.00 24.00
ATOM   20294  OH2 WAT  3364      0.381 -18.881  70.964  1.00 24.24
ATOM   20295  OH2 WAT  3365     41.050  -6.012  15.791  1.00 25.68
ATOM   20296  OH2 WAT  3366     25.036 -21.624  17.420  1.00 19.61
ATOM   20297  OH2 WAT  3367     20.757 -12.469  18.162  1.00 19.66
ATOM   20298  OH2 WAT  3368     25.031 -39.595  34.156  1.00 17.92
ATOM   20299  OH2 WAT  3369    -29.570  -5.102  46.308  1.00 22.63
ATOM   20300  OH2 WAT  3370     -4.963  11.491  58.938  1.00 26.60
ATOM   20301  OH2 WAT  3371     -1.293  15.137 -16.952  1.00 22.14
ATOM   20302  OH2 WAT  3372      7.371  10.814  64.052  1.00 22.29
ATOM   20303  OH2 WAT  3373     16.271 -27.044  44.698  1.00 21.59
ATOM   20304  OH2 WAT  3374     -9.825 -19.028  36.378  1.00 15.87
ATOM   20305  OH2 WAT  3375    -24.137  -9.482  10.270  1.00 23.02
ATOM   20306  OH2 WAT  3376    -13.705 -13.121  62.268  1.00 20.24
ATOM   20307  OH2 WAT  3377    -11.384   0.851   7.106  1.00 24.50
ATOM   20308  OH2 WAT  3378     41.978 -12.471  14.199  1.00 23.08
ATOM   20309  OH2 WAT  3379     -3.147 -14.517   6.808  1.00 23.32
ATOM   20310  OH2 WAT  3380     -0.728 -27.767  19.798  1.00 21.29
ATOM   20311  OH2 WAT  3381     -0.354  -4.894 -20.116  1.00 24.42
ATOM   20312  OH2 WAT  3382    -21.061 -11.267  68.198  1.00 30.13
ATOM   20313  OH2 WAT  3383    -14.706 -12.293  29.188  1.00 20.50
ATOM   20314  OH2 WAT  3384     43.391   2.510  23.335  1.00 25.76
ATOM   20315  OH2 WAT  3385      3.515  39.540  67.856  1.00 26.52
ATOM   20316  OH2 WAT  3386     -1.928   8.812 -25.826  1.00 33.73
ATOM   20317  OH2 WAT  3387     50.385   2.215  42.463  1.00 29.09
ATOM   20318  OH2 WAT  3388     17.087  16.878  20.716  1.00 37.71
ATOM   20319  OH2 WAT  3389      8.298  15.973   7.123  1.00 32.77
ATOM   20320  OH2 WAT  3390     34.661 -21.425  25.109  1.00 19.60
ATOM   20321  OH2 WAT  3391     19.966 -51.330  15.176  1.00 26.16
ATOM   20322  OH2 WAT  3392     -9.059  -4.483  51.040  1.00 20.52
ATOM   20323  OH2 WAT  3393     25.707 -32.629  33.317  1.00 17.81
ATOM   20324  OH2 WAT  3394      5.534  19.085   5.472  1.00 33.14
ATOM   20325  OH2 WAT  3395     14.622  19.551  55.214  1.00 19.96
ATOM   20326  OH2 WAT  3396     24.959 -14.087  20.835  1.00 28.72
ATOM   20327  OH2 WAT  3397     13.290  17.903  38.782  1.00 20.42
ATOM   20328  OH2 WAT  3398     -5.862  -4.263  56.954  1.00 32.48
ATOM   20329  OH2 WAT  3399      6.562  15.994  19.058  1.00 25.19
ATOM   20330  OH2 WAT  3400     14.970   3.846 -18.083  1.00 19.32
ATOM   20331  OH2 WAT  3401     -7.124  15.004 -19.783  1.00 24.92
ATOM   20332  OH2 WAT  3402     34.119  -8.981 -11.775  1.00 21.64
ATOM   20333  OH2 WAT  3403      5.848  15.691  37.447  1.00 21.96
ATOM   20334  OH2 WAT  3404     -4.384   5.307  38.927  1.00 28.93
ATOM   20335  OH2 WAT  3405     -8.462  19.489  -3.041  1.00 23.36
ATOM   20336  OH2 WAT  3406     21.504 -14.699  19.950  1.00 29.34
ATOM   20337  OH2 WAT  3407    -21.088   4.227  39.634  1.00 22.61
ATOM   20338  OH2 WAT  3408     -5.619 -10.651   5.927  1.00 24.23
ATOM   20339  OH2 WAT  3409     52.693   1.167  48.206  1.00 21.20
ATOM   20340  OH2 WAT  3410    -16.221  -9.667  65.559  1.00 20.52
ATOM   20341  OH2 WAT  3411    -25.467  -9.423  43.328  1.00 24.48
ATOM   20342  OH2 WAT  3412    -20.988   4.741  56.477  1.00 26.96
ATOM   20343  OH2 WAT  3413     19.198  18.956  55.185  1.00 23.07
ATOM   20344  OH2 WAT  3414    -24.253 -31.934  12.026  1.00 26.24
ATOM   20345  OH2 WAT  3415     12.072  18.774  35.664  1.00 23.52
ATOM   20346  OH2 WAT  3416    -12.454   3.743  32.390  1.00 17.67
ATOM   20347  OH2 WAT  3417    -18.447   6.868  40.520  1.00 24.96
ATOM   20348  OH2 WAT  3418      6.103  -8.025  44.128  1.00 27.53
ATOM   20349  OH2 WAT  3419    -15.120 -36.912   4.961  1.00 24.66
ATOM   20350  OH2 WAT  3420     18.742   5.029  46.950  1.00 28.56
ATOM   20351  OH2 WAT  3421     14.049 -14.727  75.131  1.00 22.18
ATOM   20352  OH2 WAT  3422     25.532 -35.284  59.886  1.00 25.87
ATOM   20353  OH2 WAT  3423     14.242   4.864   4.801  1.00 26.11
ATOM   20354  OH2 WAT  3424      2.505  -8.983  62.076  1.00 23.05
ATOM   20355  OH2 WAT  3425      6.236  16.265   5.305  1.00 24.87
ATOM   20356  OH2 WAT  3426      7.628 -26.541  40.424  1.00 27.19
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ATOM   20357  OH2 WAT  3427     10.084    5.888   54.362  1.00 18.70
ATOM   20358  OH2 WAT  3428    -27.669   -4.824   17.585  1.00 22.63
ATOM   20359  OH2 WAT  3429     16.131  -57.526   20.651  1.00 27.80
ATOM   20360  OH2 WAT  3430     33.810  -10.761   21.863  1.00 20.66
ATOM   20361  OH2 WAT  3431     38.906   -5.089  -12.711  1.00 32.66
ATOM   20362  OH2 WAT  3432      3.036    6.220   15.329  1.00 21.16
ATOM   20363  OH2 WAT  3433     -5.338    0.253   17.916  1.00 28.50
ATOM   20364  OH2 WAT  3434     -6.431   25.378   65.275  1.00 28.77
ATOM   20365  OH2 WAT  3435     30.183  -20.851   68.133  1.00 27.16
ATOM   20366  OH2 WAT  3436     43.659  -22.333   -1.106  1.00 24.34
ATOM   20367  OH2 WAT  3437     30.093   19.087   34.416  1.00 35.14
ATOM   20368  OH2 WAT  3438    -30.035   -9.535   13.285  1.00 30.59
ATOM   20369  OH2 WAT  3439    -17.340  -10.617   62.281  1.00 21.35
ATOM   20370  OH2 WAT  3440      4.191   -8.621   64.549  1.00 25.99
ATOM   20371  OH2 WAT  3441     26.000   -4.755   17.793  1.00 27.01
ATOM   20372  OH2 WAT  3442     -7.412   21.856  -20.059  1.00 21.29
ATOM   20373  OH2 WAT  3443     -7.879   17.002    4.254  1.00 26.02
ATOM   20374  OH2 WAT  3444     -9.087   -0.369    8.012  1.00 22.06
ATOM   20375  OH2 WAT  3445    -23.952    1.102   -9.034  1.00 28.67
ATOM   20376  OH2 WAT  3446    -10.640   18.228   58.792  1.00 24.48
ATOM   20377  OH2 WAT  3447    -28.943    1.338   47.872  1.00 24.52
ATOM   20378  OH2 WAT  3448      6.713  -26.895   47.186  1.00 25.17
ATOM   20379  OH2 WAT  3449    -19.226    4.149    7.394  1.00 20.22
ATOM   20380  OH2 WAT  3450     16.180  -54.471   16.613  1.00 19.97
ATOM   20381  OH2 WAT  3451      7.659   -6.722  -19.699  1.00 24.66
ATOM   20382  OH2 WAT  3452     37.335   -8.150   16.691  1.00 18.64
ATOM   20383  OH2 WAT  3453     20.745   12.571   18.819  1.00 24.11
ATOM   20384  OH2 WAT  3454    -17.203   -1.956   26.377  1.00 19.51
ATOM   20385  OH2 WAT  3455     15.288  -15.336   31.913  1.00 18.81
ATOM   20386  OH2 WAT  3456      8.707  -48.754   10.866  1.00 27.33
ATOM   20387  OH2 WAT  3457     15.343   19.454   38.824  1.00 23.12
ATOM   20388  OH2 WAT  3458     20.577  -15.545   35.392  1.00 27.66
ATOM   20389  OH2 WAT  3459     41.003    1.947   26.461  1.00 21.44
ATOM   20390  OH2 WAT  3460    -19.312   17.129   -0.087  1.00 24.24
ATOM   20391  OH2 WAT  3461     41.814  -22.072   59.142  1.00 29.16
ATOM   20392  OH2 WAT  3462    -23.822   -2.922   29.368  1.00 26.46
ATOM   20393  OH2 WAT  3463    -19.777  -17.397   63.713  1.00 22.86
ATOM   20394  OH2 WAT  3464      9.958   49.419   21.653  1.00 31.91
ATOM   20395  OH2 WAT  3465    -14.397    0.840    6.887  1.00 19.97
ATOM   20396  OH2 WAT  3466     41.165    1.509   54.227  1.00 20.56
ATOM   20397  OH2 WAT  3467     34.145  -48.601   22.561  1.00 23.68
ATOM   20398  OH2 WAT  3468     14.133   -2.489  -25.544  1.00 32.11
ATOM   20399  OH2 WAT  3469     -1.808  -41.623   29.404  1.00 23.41
ATOM   20400  OH2 WAT  3470     37.724  -31.627   30.385  1.00 31.57
ATOM   20401  OH2 WAT  3471     14.985  -55.814   12.662  1.00 21.80
ATOM   20402  OH2 WAT  3472     24.908  -25.348   43.709  1.00 20.59
ATOM   20403  OH2 WAT  3473     25.698  -49.669   27.512  1.00 22.17
ATOM   20404  OH2 WAT  3474     17.811  -17.127   39.808  1.00 17.19
ATOM   20405  OH2 WAT  3475     21.718   14.837    7.814  1.00 24.90
ATOM   20406  OH2 WAT  3476     22.441   -3.352   58.930  1.00 24.81
ATOM   20407  OH2 WAT  3477     24.448   30.315   43.032  1.00 26.95
ATOM   20408  OH2 WAT  3478     44.123   12.038   19.936  1.00 31.08
ATOM   20409  OH2 WAT  3479     20.286  -30.479   61.570  1.00 20.29
ATOM   20410  OH2 WAT  3480     38.326  -19.073   41.512  1.00 22.18
ATOM   20411  OH2 WAT  3481    -14.815   27.992   61.688  1.00 40.66
ATOM   20412  OH2 WAT  3482     34.625  -26.878   39.822  1.00 33.03
ATOM   20413  OH2 WAT  3483     -3.096   35.761    7.054  1.00 38.60
ATOM   20414  OH2 WAT  3484      9.956  -32.525   39.001  1.00 30.29
ATOM   20415  OH2 WAT  3485      4.975  -31.893   10.831  1.00 21.28
ATOM   20416  OH2 WAT  3486     17.184  -13.200  -22.519  1.00 28.57
ATOM   20417  OH2 WAT  3487      7.504   28.777   40.806  1.00 31.23
ATOM   20418  OH2 WAT  3488     -9.436   22.775   21.943  1.00 18.82
ATOM   20419  OH2 WAT  3489     29.474    3.455    1.487  1.00 32.63
ATOM   20420  OH2 WAT  3490      0.602   20.241    7.100  1.00 22.23
ATOM   20421  OH2 WAT  3491      9.850   -7.937    5.724  1.00 28.64
ATOM   20422  OH2 WAT  3492     32.489  -21.034  -10.996  1.00 30.63
ATOM   20423  OH2 WAT  3493      7.930  -16.894   18.890  1.00 20.22
ATOM   20424  OH2 WAT  3494     -4.506  -24.196    3.635  1.00 18.30
ATOM   20425  OH2 WAT  3495     10.221  -19.687   36.867  1.00 24.52
ATOM   20426  OH2 WAT  3496     -1.557   19.729   17.609  1.00 19.45
ATOM   20427  OH2 WAT  3497    -29.812   -4.805   64.317  1.00 19.66
ATOM   20428  OH2 WAT  3498    -26.364    8.727   -2.492  1.00 23.78
ATOM   20429  OH2 WAT  3499      3.181  -15.486   54.400  1.00 26.52
ATOM   20430  OH2 WAT  3500     -4.211   28.797   70.359  1.00 29.23
ATOM   20431  OH2 WAT  3501     23.091   -1.819  -22.141  1.00 27.87
ATOM   20432  OH2 WAT  3502     53.226    7.462   46.155  1.00 28.40
ATOM   20433  OH2 WAT  3503     47.327   21.844   54.130  1.00 25.03
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ATOM   20434  OH2 WAT  3504     -7.836   15.601   26.509   1.00 22.64
ATOM   20435  OH2 WAT  3505      4.797  -16.467   -3.276   1.00 30.07
ATOM   20436  OH2 WAT  3506     31.664   -6.522  -13.027   1.00 22.55
ATOM   20437  OH2 WAT  3507     21.645   31.075   60.847   1.00 17.96
ATOM   20438  OH2 WAT  3508     14.391    8.824   50.006   1.00 23.64
ATOM   20439  OH2 WAT  3509    -17.132    4.640   49.766   1.00 23.89
ATOM   20440  OH2 WAT  3510      6.062  -26.464   52.738   1.00 30.15
ATOM   20441  OH2 WAT  3511      5.200   26.208   12.471   1.00 34.21
ATOM   20442  OH2 WAT  3512     16.071    0.370  -25.723   1.00 33.79
ATOM   20443  OH2 WAT  3513     32.797   -0.260   48.448   1.00 20.41
ATOM   20444  OH2 WAT  3514    -16.216    1.768    0.259   1.00 23.90
ATOM   20445  OH2 WAT  3515     -5.097    2.007    1.772   1.00 19.02
ATOM   20446  OH2 WAT  3516    -14.399  -28.368   53.744   1.00 43.61
ATOM   20447  OH2 WAT  3517      1.256  -15.041    9.961   1.00 24.99
ATOM   20448  OH2 WAT  3518     29.943   12.201   27.604   1.00 32.31
ATOM   20449  OH2 WAT  3519     20.357   22.467   26.147   1.00 24.34
ATOM   20450  OH2 WAT  3520     11.136  -14.234   75.415   1.00 25.64
ATOM   20451  OH2 WAT  3521     38.180  -15.356   56.012   1.00 22.35
ATOM   20452  OH2 WAT  3522     24.649  -24.017    2.168   1.00 29.47
ATOM   20453  OH2 WAT  3523     36.842    8.360   26.719   1.00 24.17
ATOM   20454  OH2 WAT  3524    -30.258   -8.726   23.554   1.00 27.51
ATOM   20455  OH2 WAT  3525     17.453  -26.604   11.072   1.00 24.69
ATOM   20456  OH2 WAT  3526     -0.804  -51.986   25.853   1.00 26.03
ATOM   20457  OH2 WAT  3527     -9.459  -21.976   39.845   1.00 29.39
ATOM   20458  OH2 WAT  3528     29.511   -4.884   16.485   1.00 27.39
ATOM   20459  OH2 WAT  3529     14.158   -1.502    9.556   1.00 35.97
ATOM   20460  OH2 WAT  3530    -14.703   20.404   38.717   1.00 28.71
ATOM   20461  OH2 WAT  3531     -7.105    1.156  -13.754   1.00 18.83
ATOM   20462  OH2 WAT  3532     21.848  -21.505   48.844   1.00 27.48
ATOM   20463  OH2 WAT  3533     36.224   -2.915   32.963   1.00 27.24
ATOM   20464  OH2 WAT  3534     23.251   23.615   68.702   1.00 18.75
ATOM   20465  OH2 WAT  3535    -13.136  -41.931    8.140   1.00 22.80
ATOM   20466  OH2 WAT  3536     -3.662   29.839   18.235   1.00 22.35
ATOM   20467  OH2 WAT  3537     42.444  -25.120   50.779   1.00 30.29
ATOM   20468  OH2 WAT  3538     30.684   13.800   60.308   1.00 26.04
ATOM   20469  OH2 WAT  3539     -1.141   19.587   14.828   1.00 19.25
ATOM   20470  OH2 WAT  3540     -5.566  -28.227   31.527   1.00 31.13
ATOM   20471  OH2 WAT  3541     37.483   -2.016   49.590   1.00 23.36
ATOM   20472  OH2 WAT  3542     -4.059   -1.055   -0.721   1.00 31.71
ATOM   20473  OH2 WAT  3543     43.257   -3.965   48.382   1.00 24.84
ATOM   20474  OH2 WAT  3544     16.003   15.425   17.335   1.00 27.51
ATOM   20475  OH2 WAT  3545    -12.199   21.137   35.789   1.00 24.22
ATOM   20476  OH2 WAT  3546     43.270   11.938   40.176   1.00 30.17
ATOM   20477  OH2 WAT  3547      8.127  -56.905   24.805   1.00 19.10
ATOM   20478  OH2 WAT  3548     20.613   33.154   62.310   1.00 30.19
ATOM   20479  OH2 WAT  3549     25.111   15.458   30.152   1.00 22.79
ATOM   20480  OH2 WAT  3550     45.070    2.400   26.630   1.00 30.97
ATOM   20481  OH2 WAT  3551      2.048  -27.128   63.747   1.00 22.51
ATOM   20482  OH2 WAT  3552     -5.000    1.632  -22.794   1.00 28.73
ATOM   20483  OH2 WAT  3553     40.494  -30.756   61.314   1.00 31.19
ATOM   20484  OH2 WAT  3554     21.635   29.643   51.600   1.00 24.47
ATOM   20485  OH2 WAT  3555     20.234   18.268   52.367   1.00 25.61
ATOM   20486  OH2 WAT  3556      6.420    8.840   15.848   1.00 17.10
ATOM   20487  OH2 WAT  3557    -23.960  -31.184   20.786   1.00 23.74
ATOM   20488  OH2 WAT  3558      3.694  -28.168   52.744   1.00 28.76
ATOM   20489  OH2 WAT  3559     -0.279   24.388   69.202   1.00 29.63
ATOM   20490  OH2 WAT  3560    -13.233  -14.029    5.054   1.00 30.16
ATOM   20491  OH2 WAT  3561    -11.730    2.751   48.422   1.00 23.44
ATOM   20492  OH2 WAT  3562     25.841   -1.986   41.378   1.00 30.71
ATOM   20493  OH2 WAT  3563    -19.840    9.517   11.289   1.00 30.98
ATOM   20494  OH2 WAT  3564     35.901  -16.807   38.350   1.00 23.60
ATOM   20495  OH2 WAT  3565      5.279   14.511   23.101   1.00 32.53
ATOM   20496  OH2 WAT  3566    -12.669   24.543   21.588   1.00 27.87
ATOM   20497  OH2 WAT  3567      2.422   29.279   73.739   1.00 26.24
ATOM   20498  OH2 WAT  3568     24.933    2.790   38.157   1.00 31.71
ATOM   20499  OH2 WAT  3569     -6.126   31.127   44.730   1.00 24.66
ATOM   20500  OH2 WAT  3570     12.732  -49.375   29.754   1.00 24.42
ATOM   20501  OH2 WAT  3571     54.364   -4.263   57.668   1.00 28.75
ATOM   20502  OH2 WAT  3572      8.524    5.432   51.993   1.00 29.48
ATOM   20503  OH2 WAT  3573      2.845  -17.320   27.601   1.00 23.94
ATOM   20504  OH2 WAT  3574    -16.502   21.486  -18.054   1.00 27.10
ATOM   20505  OH2 WAT  3575     43.324   21.268   62.048   1.00 21.29
ATOM   20506  OH2 WAT  3576    -13.809  -17.874   23.626   1.00 21.22
ATOM   20507  OH2 WAT  3577      6.416  -10.418   67.564   1.00 25.45
ATOM   20508  OH2 WAT  3578     23.420  -23.177   10.075   1.00 31.50
ATOM   20509  OH2 WAT  3579     18.146    5.699   42.569   1.00 27.60
ATOM   20510  OH2 WAT  3580     10.508   14.399   39.740   1.00 21.36
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ATOM   20511  OH2 WAT   3581      0.784  -6.629   15.625  1.00 15.08
ATOM   20512  OH2 WAT   3582      5.497 -17.436   23.138  1.00 25.09
ATOM   20513  OH2 WAT   3583      7.991   6.071   43.749  1.00 15.60
ATOM   20514  OH2 WAT   3584      3.189 -11.871   38.573  1.00 16.47
ATOM   20515  OH2 WAT   3585     -0.207 -12.212   31.665  1.00 17.46
ATOM   20516  OH2 WAT   3586     13.002 -15.561   35.959  1.00 21.13
ATOM   20517  OH2 WAT   3587     20.589  15.736   21.973  1.00 26.75
ATOM   20518  OH2 WAT   3588     21.090   3.770   13.740  1.00 22.84
ATOM   20519  OH2 WAT   3589      9.607  17.572   31.827  1.00 19.08
ATOM   20520  OH2 WAT   3590      0.276 -14.520   35.798  1.00 20.57
ATOM   20521  OH2 WAT   3591    -13.859  19.020  -13.607  1.00 20.14
ATOM   20522  OH2 WAT   3592     22.420  11.927   35.726  1.00 18.41
ATOM   20523  OH2 WAT   3593     -3.566  -2.525   -6.831  1.00 34.12
ATOM   20524  OH2 WAT   3594     24.320   2.280   42.362  1.00 24.09
ATOM   20525  OH2 WAT   3595     19.088   0.614   44.019  1.00 22.35
ATOM   20526  OH2 WAT   3596     15.248   1.171  -17.886  1.00 22.97
ATOM   20527  OH2 WAT   3597     24.372   9.943   24.127  1.00 21.06
ATOM   20528  OH2 WAT   3598     16.764  -1.795   47.475  1.00 21.98
ATOM   20529  OH2 WAT   3599      0.414  -0.352   12.854  1.00 18.76
ATOM   20530  OH2 WAT   3600     -4.201 -10.546   27.179  1.00 23.37
ATOM   20531  OH2 WAT   3601      6.884  -2.275   45.268  1.00 28.10
ATOM   20532  OH2 WAT   3602     23.685  15.179   34.059  1.00 22.99
ATOM   20533  OH2 WAT   3603      2.551 -10.373   13.582  1.00 21.06
ATOM   20534  OH2 WAT   3604     21.695   8.786   16.503  1.00 23.43
ATOM   20535  OH2 WAT   3605     12.902   6.151   48.325  1.00 21.73
ATOM   20536  OH2 WAT   3606      9.189   5.244   48.426  1.00 21.63
ATOM   20537  OH2 WAT   3607      2.378 -10.193   17.669  1.00 16.25
ATOM   20538  OH2 WAT   3608      4.820 -14.212   23.885  1.00 30.32
ATOM   20539  OH2 WAT   3609     42.612  26.598   65.519  1.00 33.56
ATOM   20540  OH2 WAT   3610     12.232  -7.077   44.497  1.00 15.58
ATOM   20541  OH2 WAT   3611     11.183 -17.225   30.756  1.00 22.33
ATOM   20542  OH2 WAT   3612     34.209  -6.592  -13.887  1.00 24.62
ATOM   20543  OH2 WAT   3613      6.463  24.230    7.734  1.00 20.77
ATOM   20544  OH2 WAT   3614     33.223  -2.006    8.282  1.00 23.63
ATOM   20545  OH2 WAT   3615    -11.992 -21.341   31.338  1.00 21.59
ATOM   20546  OH2 WAT   3616     20.404 -27.602   62.377  1.00 21.88
ATOM   20547  OH2 WAT   3617     10.020 -10.313   43.379  1.00 30.16
ATOM   20548  OH2 WAT   3618     10.356 -15.159   17.815  1.00 21.94
ATOM   20549  OH2 WAT   3619      1.389 -11.017   36.934  1.00 20.03
ATOM   20550  OH2 WAT   3620      4.363 -14.468   52.055  1.00 24.43
ATOM   20551  OH2 WAT   3621     27.484   2.764   55.962  1.00 21.15
ATOM   20552  OH2 WAT   3622     24.726 -24.186   16.875  1.00 24.05
ATOM   20553  OH2 WAT   3623      0.014 -20.733   40.658  1.00 16.17
ATOM   20554  OH2 WAT   3624      2.725   4.728   52.388  1.00 26.67
ATOM   20555  OH2 WAT   3625      9.746 -14.612   38.887  1.00 21.86
ATOM   20556  OH2 WAT   3626     -4.757  -1.899    1.970  1.00 35.13
ATOM   20557  OH2 WAT   3627     16.835   4.432   45.116  1.00 18.72
ATOM   20558  OH2 WAT   3628     12.251 -47.696    7.896  1.00 22.73
ATOM   20559  OH2 WAT   3629     39.019 -10.307   16.860  1.00 20.92
ATOM   20560  OH2 WAT   3630    -15.949 -40.710   24.697  1.00 22.11
ATOM   20561  OH2 WAT   3631     25.811 -15.143   32.335  1.00 27.41
ATOM   20562  OH2 WAT   3632     15.761  -3.942   44.388  1.00 18.59
ATOM   20563  OH2 WAT   3633     31.978 -22.985   68.623  1.00 27.31
ATOM   20564  OH2 WAT   3634    -26.509  -0.176   42.412  1.00 18.54
ATOM   20565  OH2 WAT   3635    -15.520 -42.723   20.234  1.00 26.20
ATOM   20566  OH2 WAT   3636     12.167 -11.989   10.440  1.00 19.28
ATOM   20567  OH2 WAT   3637     -4.154 -47.994   12.332  1.00 35.26
ATOM   20568  OH2 WAT   3638     -1.615   3.195   59.259  1.00 25.77
ATOM   20569  OH2 WAT   3639     -9.493  -3.891   48.064  1.00 28.70
ATOM   20570  OH2 WAT   3640     16.898   8.348  -11.925  1.00 34.50
ATOM   20571  OH2 WAT   3641     32.002 -14.281  -16.376  1.00 28.21
ATOM   20572  OH2 WAT   3642     -2.196 -11.144    8.403  1.00 24.46
ATOM   20573  OH2 WAT   3643     29.916  22.387   32.574  1.00 37.43
ATOM   20574  OH2 WAT   3644     18.608  21.247   53.393  1.00 17.98
ATOM   20575  OH2 WAT   3645     38.976 -31.818   26.231  1.00 30.85
ATOM   20576  OH2 WAT   3646     20.552  -7.819   18.900  1.00 25.27
ATOM   20577  OH2 WAT   3647     12.060   9.642    9.127  1.00 22.18
ATOM   20578  OH2 WAT   3648    -31.694 -12.599   11.058  1.00 34.99
ATOM   20579  OH2 WAT   3649     37.537  -7.544   19.487  1.00 26.06
ATOM   20580  OH2 WAT   3650      0.189 -29.389   54.461  1.00 23.97
ATOM   20581  OH2 WAT   3651     -5.852 -18.327   36.510  1.00 26.63
ATOM   20582  OH2 WAT   3652     14.864  -9.336   13.735  1.00 20.83
ATOM   20583  OH2 WAT   3653    -12.948   3.519  -18.993  1.00 25.64
ATOM   20584  OH2 WAT   3654    -12.613   2.553   24.159  1.00 22.97
ATOM   20585  OH2 WAT   3655     25.889 -19.104  -21.194  1.00 24.77
ATOM   20586  OH2 WAT   3656     31.173  -1.987   20.477  1.00 24.59
ATOM   20587  OH2 WAT   3657     40.085 -39.316   22.789  1.00 28.48
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ATOM   20588   OH2 WAT   3658      3.870 -32.022    8.417   1.00 26.65
ATOM   20589   OH2 WAT   3659     18.544 -28.551   16.087   1.00 34.40
ATOM   20590   OH2 WAT   3660     -6.861 -27.077   47.127   1.00 22.70
ATOM   20591   OH2 WAT   3661     13.344 -12.961   12.757   1.00 21.21
ATOM   20592   OH2 WAT   3662     23.924  13.058   30.417   1.00 26.23
ATOM   20593   OH2 WAT   3663    -16.463   0.666   27.530   1.00 23.58
ATOM   20594   OH2 WAT   3664     29.982 -28.850   48.332   1.00 25.57
ATOM   20595   OH2 WAT   3665    -17.510   7.033   13.800   1.00 22.45
ATOM   20596   OH2 WAT   3666      1.881 -15.322   29.876   1.00 24.08
ATOM   20597   OH2 WAT   3667      6.507  -5.396   11.525   1.00 29.49
ATOM   20598   OH2 WAT   3668     46.905   1.491   23.229   1.00 29.41
ATOM   20599   OH2 WAT   3669    -32.090  -8.170   19.323   1.00 30.01
ATOM   20600   OH2 WAT   3670     22.927 -19.385   47.561   1.00 22.37
ATOM   20601   OH2 WAT   3671    -22.132  17.236    0.786   1.00 28.38
ATOM   20602   OH2 WAT   3672     33.600 -44.658   11.611   1.00 34.36
ATOM   20603   OH2 WAT   3673    -13.806   7.350   36.529   1.00 29.31
ATOM   20604   OH2 WAT   3674    -27.433 -25.257    7.569   1.00 36.53
ATOM   20605   OH2 WAT   3675     -8.731  -1.580   30.817   1.00 29.08
ATOM   20606   OH2 WAT   3676     20.432  -3.056   56.541   1.00 26.44
ATOM   20607   OH2 WAT   3677      3.370 -13.090   13.599   1.00 17.38
ATOM   20608   OH2 WAT   3678      8.012 -34.825   12.677   1.00 31.51
ATOM   20609   OH2 WAT   3679      1.072 -19.415    5.239   1.00 20.20
ATOM   20610   OH2 WAT   3680     21.321   8.443   12.592   1.00 22.90
ATOM   20611   OH2 WAT   3681     52.644   0.777   61.381   1.00 35.77
ATOM   20612   OH2 WAT   3682     -3.097 -41.815    7.665   1.00 31.57
ATOM   20613   OH2 WAT   3683     20.159 -13.750   38.154   1.00 29.71
ATOM   20614   OH2 WAT   3684     -9.685  15.081   52.281   1.00 25.91
ATOM   20615   OH2 WAT   3685     28.135  20.650    0.860   1.00 27.21
ATOM   20616   OH2 WAT   3686     39.001 -41.238   18.806   1.00 26.62
ATOM   20617   OH2 WAT   3687     40.023  -7.002   42.151   1.00 26.60
ATOM   20618   OH2 WAT   3688    -17.015   2.383    5.482   1.00 22.76
ATOM   20619   OH2 WAT   3689     31.736 -26.387   15.172   1.00 27.64
ATOM   20620   OH2 WAT   3690     37.471  -8.993  -17.582   1.00 30.40
ATOM   20621   OH2 WAT   3691     10.812  10.675   11.247   1.00 23.49
ATOM   20622   OH2 WAT   3692     36.504 -25.533   25.441   1.00 23.11
ATOM   20623   OH2 WAT   3693     22.254 -32.457   61.678   1.00 26.40
ATOM   20624   OH2 WAT   3694     11.931 -14.704    7.800   1.00 21.35
ATOM   20625   OH2 WAT   3695    -23.681 -14.788   45.643   1.00 24.78
ATOM   20626   OH2 WAT   3696      7.182 -51.466   28.627   1.00 25.44
ATOM   20627   OH2 WAT   3697    -22.958  -2.211   23.235   1.00 26.83
ATOM   20628   OH2 WAT   3698     32.975 -23.395   -0.121   1.00 22.51
ATOM   20629   OH2 WAT   3699     -4.858   3.626    3.892   1.00 28.24
ATOM   20630   OH2 WAT   3700    -25.802 -17.472   57.336   1.00 24.02
ATOM   20631   OH2 WAT   3701    -24.961  -8.029   27.571   1.00 30.46
ATOM   20632   OH2 WAT   3702    -19.843   6.476   47.329   1.00 25.78
ATOM   20633   OH2 WAT   3703    -22.522  14.871    2.427   1.00 24.66
ATOM   20634   OH2 WAT   3704     18.502  41.801   32.590   1.00 31.05
ATOM   20635   OH2 WAT   3705     -2.285  23.880  -16.394   1.00 41.88
ATOM   20636   OH2 WAT   3706      9.076   7.121   12.265   1.00 24.55
ATOM   20637   OH2 WAT   3707     22.472  16.738   36.131   1.00 28.80
ATOM   20638   OH2 WAT   3708     23.106  19.524   28.362   1.00 29.35
ATOM   20639   OH2 WAT   3709     20.660  -1.685   53.178   1.00 28.07
ATOM   20640   OH2 WAT   3710     47.414 -15.667    4.341   1.00 26.85
ATOM   20641   OH2 WAT   3711     35.787 -27.874   44.447   1.00 27.28
ATOM   20642   OH2 WAT   3712     -9.662  17.345   32.733   1.00 23.43
ATOM   20643   OH2 WAT   3713    -23.756 -18.816   55.654   1.00 27.14
ATOM   20644   OH2 WAT   3714     26.158 -26.333   67.093   1.00 25.71
ATOM   20645   OH2 WAT   3715      8.560  15.732   30.041   1.00 29.85
ATOM   20646   OH2 WAT   3716     47.272  25.719   59.342   1.00 32.35
ATOM   20647   OH2 WAT   3717     17.487  -9.851  -23.543   1.00 38.83
ATOM   20648   OH2 WAT   3718    -18.150  -9.422   11.110   1.00 24.14
ATOM   20649   OH2 WAT   3719     28.787 -33.914   15.756   1.00 21.48
ATOM   20650   OH2 WAT   3720     -2.825   9.854   58.691   1.00 29.62
ATOM   20651   OH2 WAT   3721     35.002 -40.084   48.371   1.00 34.58
ATOM   20652   OH2 WAT   3722     33.278 -36.251   12.757   1.00 26.17
ATOM   20653   OH2 WAT   3723      7.979 -20.213   33.159   1.00 18.19
ATOM   20654   OH2 WAT   3724    -18.398  28.206   46.922   1.00 33.34
ATOM   20655   OH2 WAT   3725     14.111  10.971   39.946   1.00 39.42
ATOM   20656   OH2 WAT   3726     20.899 -23.856   76.684   1.00 26.04
ATOM   20657   OH2 WAT   3727     12.600 -30.532   39.040   1.00 49.07
ATOM   20658   OH2 WAT   3728      0.214 -28.712   62.508   1.00 28.93
ATOM   20659   OH2 WAT   3729     29.212  -6.590    4.979   1.00 24.84
ATOM   20660   OH2 WAT   3730    -17.997  34.615   48.280   1.00 28.78
ATOM   20661   OH2 WAT   3731     21.283  23.102   66.907   1.00 26.75
ATOM   20662   OH2 WAT   3732      6.942 -10.436   70.783   1.00 30.98
ATOM   20663   OH2 WAT   3733    -13.774   4.431   49.066   1.00 24.84
ATOM   20664   OH2 WAT   3734     27.594   0.198   38.138   1.00 33.10
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ATOM    20665  OH2 WAT  3735     20.794   11.104   12.321  1.00 27.55
ATOM    20666  OH2 WAT  3736     51.256   16.589   59.899  1.00 30.84
ATOM    20667  OH2 WAT  3737     22.183  -14.735   24.243  1.00 28.02
ATOM    20668  OH2 WAT  3738     44.096  -11.703   13.054  1.00 28.23
ATOM    20669  OH2 WAT  3739     18.453  -23.992   49.772  1.00 32.67
ATOM    20670  OH2 WAT  3740     10.967   16.592   34.278  1.00 31.80
ATOM    20671  OH2 WAT  3741     -9.858    9.563   20.327  1.00 20.75
ATOM    20672  OH2 WAT  3742      0.898   42.404    5.444  1.00 33.16
ATOM    20673  OH2 WAT  3743      3.933  -29.127   37.039  1.00 23.75
ATOM    20674  OH2 WAT  3744     36.228  -24.732   33.177  1.00 44.37
ATOM    20675  OH2 WAT  3745      3.159    7.122   37.485  1.00 29.60
ATOM    20676  OH2 WAT  3746    -10.921    2.269   51.233  1.00 27.65
ATOM    20677  OH2 WAT  3747     53.348   17.944   49.378  1.00 27.14
ATOM    20678  OH2 WAT  3748      7.606   22.178   51.653  1.00 40.12
ATOM    20679  OH2 WAT  3749     39.204  -34.717   27.730  1.00 24.03
ATOM    20680  OH2 WAT  3750     13.564   19.874   31.976  1.00 23.45
ATOM    20681  OH2 WAT  3751     -3.814  -23.747   36.732  1.00 26.02
ATOM    20682  OH2 WAT  3752     47.146   16.831   44.337  1.00 26.65
ATOM    20683  OH2 WAT  3753     13.930  -30.419   44.084  1.00 25.81
ATOM    20684  OH2 WAT  3754      9.861   -9.263    8.727  1.00 30.58
ATOM    20685  OH2 WAT  3755     23.683   32.606   59.197  1.00 32.94
ATOM    20686  OH2 WAT  3756     20.056   31.032   18.101  1.00 36.08
ATOM    20687  OH2 WAT  3757    -10.879   29.267   63.971  1.00 35.86
ATOM    20688  OH2 WAT  3758      4.038  -17.119   70.287  1.00 32.53
ATOM    20689  OH2 WAT  3759     -8.558  -23.729    1.645  1.00 40.40
ATOM    20690  OH2 WAT  3760     -9.873   16.727   21.573  1.00 27.26
ATOM    20691  OH2 WAT  3761     35.205  -25.918   42.503  1.00 30.87
ATOM    20692  OH2 WAT  3762      1.971   24.125   46.097  1.00 25.29
ATOM    20693  OH2 WAT  3763     53.325   -5.919   60.231  1.00 28.08
ATOM    20694  OH2 WAT  3764     10.053   18.498    6.878  1.00 33.94
ATOM    20695  OH2 WAT  3765     19.406  -29.642   19.266  1.00 28.80
ATOM    20696  OH2 WAT  3766     16.098   14.581   21.816  1.00 36.36
ATOM    20697  OH2 WAT  3767     -6.338   25.111   -7.103  1.00 28.61
ATOM    20698  OH2 WAT  3768     48.102   21.342    3.587  1.00 36.19
ATOM    20699  OH2 WAT  3769     -9.125  -25.882   48.916  1.00 39.40
ATOM    20700  OH2 WAT  3770      6.373   14.161   30.878  1.00 25.95
ATOM    20701  OH2 WAT  3771     18.098   37.562   30.318  1.00 29.01
ATOM    20702  OH2 WAT  3772     -4.272  -41.366   30.616  1.00 33.77
ATOM    20703  OH2 WAT  3773    -24.088  -15.889   26.441  1.00 33.05
ATOM    20704  OH2 WAT  3774      5.765   13.265   64.636  1.00 43.14
ATOM    20705  OH2 WAT  3775    -24.832   -2.210   12.951  1.00 32.20
ATOM    20706  OH2 WAT  3776     35.826  -23.014   22.538  1.00 27.58
ATOM    20707  OH2 WAT  3777     34.896  -31.558   17.395  1.00 35.22
ATOM    20708  OH2 WAT  3778     12.653   27.171   37.327  1.00 34.77
ATOM    20709  OH2 WAT  3779     26.085    8.717    7.225  1.00 27.52
ATOM    20710  OH2 WAT  3780     14.808   13.935    2.743  1.00 28.55
ATOM    20711  OH2 WAT  3781      7.008   41.307    8.799  1.00 21.88
ATOM    20712  OH2 WAT  3782    -29.750  -15.615   50.483  1.00 33.58
ATOM    20713  OH2 WAT  3783     42.042    7.501   10.339  1.00 32.40
ATOM    20714  OH2 WAT  3784     38.647  -37.049   26.470  1.00 27.62
ATOM    20715  OH2 WAT  3785     20.114  -10.501   38.007  1.00 33.84
ATOM    20716  OH2 WAT  3786     33.193   13.567    2.822  1.00 33.07
ATOM    20717  OH2 WAT  3787     41.018   -5.644    6.389  1.00 32.27
ATOM    20718  OH2 WAT  3788      1.927   13.217   17.887  1.00 23.25
ATOM    20719  OH2 WAT  3789      0.063  -39.198    5.123  1.00 40.67
ATOM    20720  OH2 WAT  3790     14.610   -2.645   49.001  1.00 23.41
ATOM    20721  OH2 WAT  3791     29.017  -41.765   34.853  1.00 29.00
ATOM    20722  OH2 WAT  3792     16.478   28.346   37.634  1.00 26.47
ATOM    20723  OH2 WAT  3793      2.863  -52.758   24.049  1.00 35.61
ATOM    20724  OH2 WAT  3794    -11.416   19.596   17.671  1.00 27.30
ATOM    20725  OH2 WAT  3795     32.706  -47.734   14.100  1.00 27.60
ATOM    20726  OH2 WAT  3796      3.656    6.892   17.830  1.00 29.51
ATOM    20727  OH2 WAT  3797     34.924  -21.245  -11.957  1.00 26.01
ATOM    20728  OH2 WAT  3798    -23.350    8.284   62.170  1.00 26.06
ATOM    20729  OH2 WAT  3799     21.618    5.515   19.392  1.00 30.34
ATOM    20730  OH2 WAT  3800      3.296   31.352   59.084  1.00 20.90
ATOM    20731  OH2 WAT  3801     11.215   -4.478   10.504  1.00 26.27
ATOM    20732  OH2 WAT  3802     17.465   28.856   49.985  1.00 32.00
ATOM    20733  OH2 WAT  3803     30.546   21.709   36.983  1.00 33.86
ATOM    20734  OH2 WAT  3804    -13.822    6.385   18.289  1.00 26.93
ATOM    20735  OH2 WAT  3805     40.370   26.108   57.308  1.00 33.23
ATOM    20736  OH2 WAT  3806    -18.730   19.657    0.767  1.00 34.40
ATOM    20737  OH2 WAT  3807     46.787  -11.310    5.258  1.00 33.73
ATOM    20738  OH2 WAT  3808      6.196   37.401   65.886  1.00 25.32
ATOM    20739  OH2 WAT  3809     33.898  -16.337   34.979  1.00 25.93
ATOM    20740  OH2 WAT  3810    -29.017  -32.892   18.794  1.00 34.70
ATOM    20741  OH2 WAT  3811      5.143   46.820   14.606  1.00 30.65
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ATOM   20742  OH2 WAT  3812      7.988   -3.484   64.242  1.00 31.97
ATOM   20743  OH2 WAT  3813      5.432   -9.598   10.054  1.00 29.06
ATOM   20744  OH2 WAT  3814     19.243    6.256   -9.064  1.00 30.91
ATOM   20745  OH2 WAT  3815     43.635  -21.259   49.737  1.00 28.64
ATOM   20746  OH2 WAT  3816     -5.313    6.920   37.151  1.00 30.93
ATOM   20747  OH2 WAT  3817      4.504   24.582   -5.136  1.00 32.05
ATOM   20748  OH2 WAT  3818     10.520    3.740  -26.086  1.00 34.31
ATOM   20749  OH2 WAT  3819     62.545   14.377   25.314  1.00 43.40
ATOM   20750  OH2 WAT  3820      9.862  -15.964   13.553  1.00 29.65
ATOM   20751  OH2 WAT  3821     -0.387  -50.398   19.754  1.00 33.87
ATOM   20752  OH2 WAT  3822      2.304   -6.547   19.517  1.00 31.26
ATOM   20753  OH2 WAT  3823     41.519  -23.035   -7.279  1.00 42.38
ATOM   20754  OH2 WAT  3824     16.162  -20.007   75.071  1.00 26.45
ATOM   20755  OH2 WAT  3825     10.546  -21.372    6.968  1.00 26.45
ATOM   20756  OH2 WAT  3826    -11.694  -23.711   34.633  1.00 29.90
ATOM   20757  OH2 WAT  3827     14.382  -28.322   57.340  1.00 41.11
ATOM   20758  OH2 WAT  3828     33.815  -17.624   23.792  1.00 26.84
ATOM   20759  OH2 WAT  3829    -10.831   -0.831    4.970  1.00 24.36
ATOM   20760  OH2 WAT  3830      7.070   13.238  -20.561  1.00 30.58
ATOM   20761  OH2 WAT  3831     -1.423  -43.194   35.158  1.00 28.74
ATOM   20762  OH2 WAT  3832     16.519  -33.636   38.322  1.00 24.42
ATOM   20763  OH2 WAT  3833     17.520   22.887   73.186  1.00 33.05
ATOM   20764  OH2 WAT  3834     -2.872   -6.802   25.146  1.00 32.72
ATOM   20765  OH2 WAT  3835     18.475  -54.085   15.078  1.00 34.15
ATOM   20766  OH2 WAT  3836     41.800  -20.963   55.130  1.00 27.59
ATOM   20767  OH2 WAT  3837     -7.482   -4.152   30.462  1.00 29.41
ATOM   20768  OH2 WAT  3838    -17.203  -14.842   28.926  1.00 26.31
ATOM   20769  OH2 WAT  3839     23.941   17.177   27.224  1.00 23.52
ATOM   20770  OH2 WAT  3840    -17.547   18.133  -10.035  1.00 26.05
ATOM   20771  OH2 WAT  3841    -11.739   21.608   19.442  1.00 29.94
ATOM   20772  OH2 WAT  3842     -1.775  -31.809   56.054  1.00 29.15
ATOM   20773  OH2 WAT  3843     26.925  -28.472   40.778  1.00 31.95
ATOM   20774  OH2 WAT  3844     13.649  -18.971    8.359  1.00 28.20
ATOM   20775  OH2 WAT  3845     -1.364   38.574   55.862  1.00 34.22
ATOM   20776  OH2 WAT  3846     49.423   21.080   55.366  1.00 24.86
ATOM   20777  OH2 WAT  3847     -0.268  -12.614    7.599  1.00 38.86
ATOM   20778  OH2 WAT  3848     -4.305  -53.041   14.218  1.00 31.46
ATOM   20779  OH2 WAT  3849     12.067  -31.885   21.029  1.00 27.96
ATOM   20780  OH2 WAT  3850      1.046  -35.638   34.940  1.00 25.32
ATOM   20781  OH2 WAT  3851     -0.470   22.594   36.668  1.00 25.41
ATOM   20782  OH2 WAT  3852     -1.223   -1.667   38.153  1.00 24.06
ATOM   20783  OH2 WAT  3853     24.503   -1.990   58.124  1.00 28.69
ATOM   20784  OH2 WAT  3854     17.864  -13.588   29.400  1.00 23.88
ATOM   20785  OH2 WAT  3855    -28.291  -14.815   57.051  1.00 26.82
ATOM   20786  OH2 WAT  3856     20.622   -5.682   38.418  1.00 33.21
ATOM   20787  OH2 WAT  3857     -7.378  -24.739    4.250  1.00 36.23
ATOM   20788  OH2 WAT  3858     50.437   -6.107   52.678  1.00 25.23
ATOM   20789  OH2 WAT  3859    -32.230   -8.257   14.449  1.00 36.13
ATOM   20790  OH2 WAT  3860     24.061  -50.798   39.085  1.00 41.51
ATOM   20791  OH2 WAT  3861     29.292    7.952   26.061  1.00 36.29
ATOM   20792  OH2 WAT  3862     37.184   10.315   28.928  1.00 28.67
ATOM   20793  OH2 WAT  3863     36.355  -20.183   38.839  1.00 25.50
ATOM   20794  OH2 WAT  3864     -0.607    5.406   54.644  1.00 23.50
ATOM   20795  OH2 WAT  3865     11.302  -47.890   27.551  1.00 20.57
ATOM   20796  OH2 WAT  3866    -15.007   23.732   62.688  1.00 31.11
ATOM   20797  OH2 WAT  3867     42.181  -21.336   46.400  1.00 28.39
ATOM   20798  OH2 WAT  3868     32.816   16.299   26.091  1.00 28.85
ATOM   20799  OH2 WAT  3869     15.315   17.295   25.040  1.00 20.18
ATOM   20800  OH2 WAT  3870      7.289  -17.152   -3.029  1.00 29.44
ATOM   20801  OH2 WAT  3871      2.717   42.008   66.372  1.00 27.89
ATOM   20802  OH2 WAT  3872     34.914  -28.691   18.175  1.00 19.17
ATOM   20803  OH2 WAT  3873     18.616   13.919   13.090  1.00 32.78
ATOM   20804  OH2 WAT  3874    -18.466  -37.393   25.244  1.00 32.88
ATOM   20805  OH2 WAT  3875     12.836   43.517   24.922  1.00 31.86
ATOM   20806  OH2 WAT  3876    -25.602   12.369    0.165  1.00 27.51
ATOM   20807  OH2 WAT  3877     24.200    7.550   21.778  1.00 31.56
ATOM   20808  OH2 WAT  3878     -0.145   -8.461   22.519  1.00 26.05
ATOM   20809  OH2 WAT  3879    -23.514  -16.029   43.033  1.00 33.79
ATOM   20810  OH2 WAT  3880      9.948   50.191   -0.282  1.00 30.98
ATOM   20811  OH2 WAT  3881      2.703  -13.370    5.739  1.00 35.46
ATOM   20812  OH2 WAT  3882     20.914   25.963   17.772  1.00 28.78
ATOM   20813  OH2 WAT  3883     34.528   11.261    3.220  1.00 31.17
ATOM   20814  OH2 WAT  3884     16.134  -53.497   28.465  1.00 33.54
ATOM   20815  OH2 WAT  3885     -2.387   38.437   61.965  1.00 31.00
ATOM   20816  OH2 WAT  3886     43.549   -6.595    8.700  1.00 33.92
ATOM   20817  OH2 WAT  3887     35.170   -2.113    5.111  1.00 23.74
ATOM   20818  OH2 WAT  3888    -25.332  -27.546   33.584  1.00 32.68
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ATOM  20819  OH2 WAT  3889     9.100    5.403   58.911  1.00 28.07
ATOM  20820  OH2 WAT  3890    -2.005    3.998   40.706  1.00 30.75
ATOM  20821  OH2 WAT  3891    -7.292  -27.296    1.998  1.00 38.01
ATOM  20822  OH2 WAT  3892    19.157   -5.927   15.506  1.00 31.49
ATOM  20823  OH2 WAT  3893   -18.372   23.651   43.344  1.00 37.66
ATOM  20824  OH2 WAT  3894    31.262  -51.492   16.861  1.00 24.13
ATOM  20825  OH2 WAT  3895   -26.499    9.900    3.726  1.00 39.65
ATOM  20826  OH2 WAT  3896     4.097   31.182   75.075  1.00 32.65
ATOM  20827  OH2 WAT  3897     2.547    4.374   39.181  1.00 30.86
ATOM  20828  OH2 WAT  3898    15.775  -19.780   -5.586  1.00 40.14
ATOM  20829  OH2 WAT  3899    25.581  -38.670   36.519  1.00 28.00
ATOM  20830  OH2 WAT  3900    -5.538  -11.112    0.952  1.00 35.04
ATOM  20831  OH2 WAT  3901    22.835   -4.612   16.494  1.00 29.12
ATOM  20832  OH2 WAT  3902    12.797   17.517   28.765  1.00 25.18
ATOM  20833  OH2 WAT  3903     4.058  -26.546    4.576  1.00 30.15
ATOM  20834  OH2 WAT  3904    29.516   -1.506   18.412  1.00 35.13
ATOM  20835  OH2 WAT  3905     8.641  -41.868   14.364  1.00 24.18
ATOM  20836  OH2 WAT  3906    17.066   16.097   14.366  1.00 23.39
ATOM  20837  OH2 WAT  3907    24.988   -0.851  -20.057  1.00 29.57
ATOM  20838  OH2 WAT  3908    -5.479  -33.973   28.883  1.00 27.02
ATOM  20839  OH2 WAT  3909   -35.530  -14.033   12.897  1.00 34.50
ATOM  20840  OH2 WAT  3910   -19.863   23.952   46.624  1.00 32.52
ATOM  20841  OH2 WAT  3911    11.250  -32.899   13.772  1.00 26.39
ATOM  20842  OH2 WAT  3912    18.533   26.176   31.373  1.00 26.30
ATOM  20843  OH2 WAT  3913    11.461  -44.385   34.329  1.00 36.66
ATOM  20844  OH2 WAT  3914    49.046    8.099   27.030  1.00 31.36
ATOM  20845  OH2 WAT  3915    -6.962   47.797   20.546  1.00 35.11
ATOM  20846  OH2 WAT  3916   -11.454   27.697   39.038  1.00 34.68
ATOM  20847  OH2 WAT  3917   -17.534   -6.063  -15.347  1.00 33.23
ATOM  20848  OH2 WAT  3918   -20.662   24.797   51.285  1.00 38.11
ATOM  20849  OH2 WAT  3919   -15.182   22.940   -8.359  1.00 32.06
ATOM  20850  OH2 WAT  3920    -5.318   20.153  -21.024  1.00 36.60
ATOM  20851  OH2 WAT  3921    29.287   32.027   23.219  1.00 29.21
ATOM  20852  OH2 WAT  3922     5.296    4.996   60.230  1.00 27.47
ATOM  20853  OH2 WAT  3923     0.917  -45.819   34.364  1.00 33.20
ATOM  20854  OH2 WAT  3924     3.488    6.382   55.858  1.00 25.52
ATOM  20855  OH2 WAT  3925    32.958    6.677   47.699  1.00 22.12
ATOM  20856  OH2 WAT  3926   -23.321  -11.254   27.790  1.00 35.27
ATOM  20857  OH2 WAT  3927    32.860   27.703   46.551  1.00 32.44
ATOM  20858  OH2 WAT  3928    -1.426   25.054   11.614  1.00 29.69
ATOM  20859  OH2 WAT  3929   -15.519   16.582   14.184  1.00 28.11
ATOM  20860  OH2 WAT  3930    43.595  -17.787    8.451  1.00 30.25
ATOM  20861  OH2 WAT  3931    23.063    6.691   36.902  1.00 33.20
ATOM  20862  OH2 WAT  3932    -9.032    1.177   27.078  1.00 34.25
ATOM  20863  OH2 WAT  3933    31.257   21.599    1.621  1.00 37.72
ATOM  20864  OH2 WAT  3934    38.507  -21.072  -10.854  1.00 25.61
ATOM  20865  OH2 WAT  3935   -23.025   12.738  -10.126  1.00 28.93
ATOM  20866  OH2 WAT  3936    22.699  -11.887   36.490  1.00 24.74
ATOM  20867  OH2 WAT  3937    17.275   -3.978   40.410  1.00 32.51
ATOM  20868  OH2 WAT  3938     7.861   15.365   34.973  1.00 44.23
ATOM  20869  OH2 WAT  3939    11.275   25.692   34.511  1.00 32.64
ATOM  20870  OH2 WAT  3940    -3.313  -38.226   29.667  1.00 33.46
ATOM  20871  OH2 WAT  3941    -7.692  -42.437   29.109  1.00 43.80
ATOM  20872  OH2 WAT  3942   -13.863   31.441   25.663  1.00 37.38
ATOM  20873  OH2 WAT  3943   -12.474  -21.794   42.793  1.00 34.53
ATOM  20874  OH2 WAT  3944    -3.638   41.102   62.525  1.00 37.56
ATOM  20875  OH2 WAT  3945   -18.227   25.816   55.937  1.00 30.59
ATOM  20876  OH2 WAT  3946   -15.985  -38.554   28.518  1.00 32.77
ATOM  20877  OH2 WAT  3947    34.669  -24.614   67.209  1.00 25.76
ATOM  20878  OH2 WAT  3948    54.577   15.128   52.543  1.00 33.52
ATOM  20879  OH2 WAT  3949     0.887  -14.120    4.073  1.00 36.74
ATOM  20880  OH2 WAT  3950   -15.097   35.053   18.039  1.00 37.02
ATOM  20881  OH2 WAT  3951    15.818    2.198    9.301  1.00 29.29
ATOM  20882  OH2 WAT  3952   -22.631    7.920  -14.709  1.00 23.92
ATOM  20883  OH2 WAT  3953     1.132  -17.635   32.905  1.00 29.71
ATOM  20884  OH2 WAT  3954   -24.033  -11.665   68.949  1.00 36.66
ATOM  20885  OH2 WAT  3955    31.947  -26.774   44.122  1.00 27.95
ATOM  20886  OH2 WAT  3956    27.559  -23.512   73.698  1.00 34.23
ATOM  20887  OH2 WAT  3957    40.516   20.972   40.033  1.00 37.10
ATOM  20888  OH2 WAT  3958   -21.789  -38.079   25.502  1.00 23.71
ATOM  20889  OH2 WAT  3959    27.138   35.825   22.971  1.00 29.72
ATOM  20890  OH2 WAT  3960     6.627   13.854   67.881  1.00 33.43
ATOM  20891  OH2 WAT  3961    -7.495   30.319   65.877  1.00 47.88
ATOM  20892  OH2 WAT  3962    39.945  -16.981   59.063  1.00 41.80
ATOM  20893  OH2 WAT  3963    10.451   -0.990   11.902  1.00 42.44
ATOM  20894  OH2 WAT  3964   -19.187   17.170    7.811  1.00 34.07
ATOM  20895  OH2 WAT  3965    55.677    8.381   57.068  1.00 34.33
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ATOM   20896  OH2 WAT   3966    -21.554   13.101    7.475  1.00 24.12
ATOM   20897  OH2 WAT   3967      8.150  -27.034   50.434  1.00 39.84
ATOM   20898  OH2 WAT   3968    -18.831    9.121   46.959  1.00 30.55
ATOM   20899  OH2 WAT   3969     50.680    1.961   15.800  1.00 35.02
ATOM   20900  OH2 WAT   3970     35.217  -49.138   25.289  1.00 34.87
ATOM   20901  OH2 WAT   3971    -29.398   -8.042   11.100  1.00 31.40
ATOM   20902  OH2 WAT   3972     19.447   17.441   13.441  1.00 29.33
ATOM   20903  OH2 WAT   3973    -13.103    5.510   51.486  1.00 32.37
ATOM   20904  OH2 WAT   3974     35.572  -38.920   31.797  1.00 29.21
ATOM   20905  OH2 WAT   3975     42.490   -6.432   48.177  1.00 37.33
ATOM   20906  OH2 WAT   3976     55.908    7.452   19.225  1.00 41.37
ATOM   20907  OH2 WAT   3977    -23.545   12.346  -12.731  1.00 36.65
ATOM   20908  OH2 WAT   3978     29.194  -25.699   42.423  1.00 28.23
ATOM   20909  OH2 WAT   3979     24.546    4.768   33.624  1.00 34.00
ATOM   20910  OH2 WAT   3980     11.846  -56.638   27.547  1.00 36.56
ATOM   20911  OH2 WAT   3981    -11.970  -28.236   68.101  1.00 31.56
ATOM   20912  OH2 WAT   3982     34.680    0.521   51.130  1.00 26.18
ATOM   20913  OH2 WAT   3983     24.960  -27.638   15.617  1.00 35.13
ATOM   20914  OH2 WAT   3984     12.178  -47.174   31.370  1.00 34.11
ATOM   20915  OH2 WAT   3985    -12.298  -29.408   25.980  1.00 20.06
ATOM   20916  OH2 WAT   3986     -5.239   -4.738   26.410  1.00 30.64
ATOM   20917  OH2 WAT   3987      7.222   25.190   72.525  1.00 29.80
ATOM   20918  OH2 WAT   3988     -8.316  -17.085    4.491  1.00 32.12
ATOM   20919  OH2 WAT   3989     14.875  -37.478   62.713  1.00 36.51
ATOM   20920  OH2 WAT   3990     -0.318  -32.480   35.647  1.00 31.85
ATOM   20921  OH2 WAT   3991     26.991    6.700   24.647  1.00 28.93
ATOM   20922  OH2 WAT   3992      9.431  -16.988    4.689  1.00 31.20
ATOM   20923  OH2 WAT   3993     23.751   35.159   59.828  1.00 30.73
ATOM   20924  OH2 WAT   3994    -29.524    4.920   48.463  1.00 38.77
ATOM   20925  OH2 WAT   3995    -10.036   20.469    3.697  1.00 27.33
ATOM   20926  OH2 WAT   3996     13.430  -13.926   30.486  1.00 27.55
ATOM   20927  OH2 WAT   3997    -19.648  -30.155    4.910  1.00 27.29
ATOM   20928  OH2 WAT   3998     -1.861    2.934   16.906  1.00 22.81
ATOM   20929  OH2 WAT   3999     -6.312  -20.345   39.194  1.00 36.98
ATOM   20930  OH2 WAT   4000      0.162   16.385   31.968  1.00 40.85
ATOM   20931  OH2 WAT   4001     37.331  -42.808   29.079  1.00 35.13
ATOM   20932  OH2 WAT   4002      1.728    0.651   41.556  1.00 40.93
ATOM   20933  OH2 WAT   4003      7.955  -18.489   -7.241  1.00 41.83
ATOM   20934  OH2 WAT   4004     -2.324  -24.753   41.326  1.00 36.27
ATOM   20935  OH2 WAT   4005    -14.001  -19.794   -0.066  1.00 34.42
ATOM   20936  OH2 WAT   4006     19.662  -17.365  -18.983  1.00 32.80
ATOM   20937  OH2 WAT   4007     10.564  -14.743  -13.275  1.00 29.84
ATOM   20938  OH2 WAT   4008     15.113   15.031   39.754  1.00 30.34
ATOM   20939  OH2 WAT   4009     35.331  -21.374   20.527  1.00 31.28
ATOM   20940  OH2 WAT   4010     22.819   15.879    3.191  1.00 35.03
ATOM   20941  OH2 WAT   4011    -10.543  -46.147    9.362  1.00 38.45
ATOM   20942  OH2 WAT   4012    -16.594   34.561   56.964  1.00 28.81
ATOM   20943  OH2 WAT   4013    -10.146   32.295   63.758  1.00 37.29
ATOM   20944  OH2 WAT   4014     48.882   -7.382   51.071  1.00 37.37
ATOM   20945  OH2 WAT   4015     29.920    7.293   29.541  1.00 33.85
ATOM   20946  OH2 WAT   4016     19.625  -12.921   72.073  1.00 36.63
ATOM   20947  OH2 WAT   4017     13.368  -34.511   37.285  1.00 29.54
ATOM   20948  OH2 WAT   4018     -5.762   -7.177   29.837  1.00 31.23
ATOM   20949  OH2 WAT   4019     11.378  -38.956   13.198  1.00 31.14
ATOM   20950  OH2 WAT   4020     -7.090  -14.815   72.040  1.00 26.77
ATOM   20951  OH2 WAT   4021      2.252   22.804   -7.049  1.00 32.91
ATOM   20952  OH2 WAT   4022     -3.449   14.552  -24.093  1.00 36.29
ATOM   20953  OH2 WAT   4023     -8.112    3.142  -24.672  1.00 33.84
ATOM   20954  OH2 WAT   4024     18.026  -21.806    8.212  1.00 29.93
ATOM   20955  OH2 WAT   4025     60.020   17.539   13.000  1.00 44.67
ATOM   20956  OH2 WAT   4026    -26.370  -39.869   16.104  1.00 41.85
ATOM   20957  OH2 WAT   4027     16.764   19.360   52.609  1.00 28.33
ATOM   20958  OH2 WAT   4028     35.990   24.016   40.511  1.00 34.74
ATOM   20959  OH2 WAT   4029     57.458   10.198   50.817  1.00 32.75
ATOM   20960  OH2 WAT   4030      1.804  -47.829   30.519  1.00 26.50
ATOM   20961  OH2 WAT   4031    -10.626   -9.725   72.521  1.00 38.53
ATOM   20962  OH2 WAT   4032     43.991  -27.164   51.358  1.00 25.47
ATOM   20963  OH2 WAT   4033    -28.328  -39.519   17.822  1.00 37.78
ATOM   20964  OH2 WAT   4034    -29.987  -22.766    8.334  1.00 31.96
ATOM   20965  OH2 WAT   4035      2.256   13.057  -20.781  1.00 40.03
ATOM   20966  OH2 WAT   4036     25.989  -20.630  -14.613  1.00 32.18
ATOM   20967  OH2 WAT   4037      2.215  -18.558   69.068  1.00 34.21
ATOM   20968  OH2 WAT   4038    -36.511  -18.857   14.921  1.00 29.01
ATOM   20969  OH2 WAT   4039      2.072   25.410   67.667  1.00 25.96
ATOM   20970  OH2 WAT   4040     -4.117  -40.064   35.025  1.00 27.36
ATOM   20971  OH2 WAT   4041      3.196   26.403   17.608  1.00 32.65
ATOM   20972  OH2 WAT   4042      4.213  -11.022   21.040  1.00 25.61
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ATOM   20973   OH2 WAT   4043      20.672    6.288   43.154   1.00 11.39
ATOM   20974   OH2 WAT   4044      24.230   13.675   24.481   1.00 17.87
ATOM   20975   OH2 WAT   4045      11.491  -12.039   39.730   1.00 16.52
ATOM   20976   OH2 WAT   4046      -2.958  -45.541   12.487   1.00 25.04
ATOM   20977   OH2 WAT   4047      21.124    0.639   54.913   1.00 19.00
ATOM   20978   OH2 WAT   4048      10.830  -15.313   20.740   1.00 17.94
ATOM   20979   OH2 WAT   4049       7.082    3.993   47.118   1.00 22.59
ATOM   20980   OH2 WAT   4050     -15.003   20.551  -11.225   1.00 23.46
ATOM   20981   OH2 WAT   4051       5.614   -3.781   42.911   1.00 18.68
ATOM   20982   OH2 WAT   4052       2.878   -5.383   14.276   1.00 21.86
ATOM   20983   OH2 WAT   4053     -28.975    0.173   43.415   1.00 25.48
ATOM   20984   OH2 WAT   4054      18.990   13.786   23.082   1.00 34.23
ATOM   20985   OH2 WAT   4055      14.863   15.999   12.872   1.00 22.69
ATOM   20986   OH2 WAT   4056       4.404  -26.590   36.835   1.00 20.51
ATOM   20987   OH2 WAT   4057      16.881   17.463   50.738   1.00 25.65
ATOM   20988   OH2 WAT   4058       7.759  -15.429   23.245   1.00 25.72
ATOM   20989   OH2 WAT   4059       1.948   -8.274   37.874   1.00 24.67
ATOM   20990   OH2 WAT   4060      -0.846    5.377   57.566   1.00 26.92
ATOM   20991   OH2 WAT   4061      11.838  -16.631   28.299   1.00 26.60
ATOM   20992   OH2 WAT   4062       8.670   -7.127    7.982   1.00 23.89
ATOM   20993   OH2 WAT   4063       7.943    4.878   13.325   1.00 29.72
ATOM   20994   OH2 WAT   4064      -7.873  -18.149   38.159   1.00 24.67
ATOM   20995   OH2 WAT   4065      19.946  -16.578   22.471   1.00 21.68
ATOM   20996   OH2 WAT   4066      26.755  -23.578   42.730   1.00 30.96
ATOM   20997   OH2 WAT   4067      19.813  -21.428   77.332   1.00 26.96
ATOM   20998   OH2 WAT   4068     -14.611  -27.813   24.596   1.00 22.85
ATOM   20999   OH2 WAT   4069      10.556  -42.741   36.183   1.00 30.39
ATOM   21000   OH2 WAT   4070       9.656   11.940   15.495   1.00 33.39
ATOM   21001   OH2 WAT   4071      15.586   -6.472   42.294   1.00 26.75
ATOM   21002   OH2 WAT   4072      21.817   15.587   28.120   1.00 36.02
ATOM   21003   OH2 WAT   4073      42.955  -29.610   52.935   1.00 30.64
ATOM   21004   OH2 WAT   4074      -5.163  -46.625    9.621   1.00 25.65
ATOM   21005   OH2 WAT   4075     -22.661  -39.337   16.988   1.00 29.68
ATOM   21006   OH2 WAT   4076      12.558   54.160   17.405   1.00 42.52
ATOM   21007   OH2 WAT   4077      14.558  -21.050   -8.217   1.00 35.25
ATOM   21008   OH2 WAT   4078      14.627  -21.292   77.322   1.00 26.15
ATOM   21009   OH2 WAT   4079      38.511   12.796   27.817   1.00 32.17
ATOM   21010   OH2 WAT   4080       6.634  -11.234   41.030   1.00 33.51
ATOM   21011   OH2 WAT   4081      19.800    4.002   -7.345   1.00 31.84
ATOM   21012   OH2 WAT   4082     -11.712   14.246  -16.297   1.00 37.20
ATOM   21013   OH2 WAT   4083      -1.181   12.792  -23.740   1.00 27.77
ATOM   21014   OH2 WAT   4084     -13.478   31.890   22.898   1.00 35.63
ATOM   21015   OH2 WAT   4085     -26.720   -9.960   27.431   1.00 31.59
ATOM   21016   OH2 WAT   4086      21.413  -27.440   21.028   1.00 46.92
ATOM   21017   OH2 WAT   4087      21.955  -19.353  -18.425   1.00 22.71
ATOM   21018   OH2 WAT   4088      12.468   -6.264   66.043   1.00 33.46
ATOM   21019   OH2 WAT   4089      13.249  -36.608   12.813   1.00 30.40
ATOM   21020   OH2 WAT   4090      31.960   -4.177   33.906   1.00 33.61
ATOM   21021   OH2 WAT   4091       7.583  -54.047   28.356   1.00 26.52
ATOM   21022   OH2 WAT   4092       0.614   21.888   44.748   1.00 35.94
ATOM   21023   OH2 WAT   4093      37.538   -5.989   37.641   1.00 32.64
ATOM   21024   OH2 WAT   4094      21.638    5.075   39.740   1.00 17.05
ATOM   21025   OH2 WAT   4095      28.273  -46.828   32.920   1.00 24.39
ATOM   21026   OH2 WAT   4096      11.835  -19.653    5.133   1.00 25.49
ATOM   21027   OH2 WAT   4097     -13.207  -44.364    8.973   1.00 37.09
ATOM   21028   OH2 WAT   4098      27.647   11.322    5.334   1.00 32.90
ATOM   21029   OH2 WAT   4099      10.259  -49.393    8.411   1.00 26.63
ATOM   21030   OH2 WAT   4100       4.110  -39.224   10.206   1.00 32.32
ATOM   21031   OH2 WAT   4101      23.743  -40.087   37.856   1.00 50.14
ATOM   21032   OH2 WAT   4102     -24.342   -7.153   30.038   1.00 30.58
ATOM   21033   OH2 WAT   4103      -0.619   11.724  -26.102   1.00 35.65
ATOM   21034   OH2 WAT   4104      -9.425   29.111   31.719   1.00 37.15
ATOM   21035   OH2 WAT   4105      32.807  -16.675   32.368   1.00 36.40
ATOM   21036   OH2 WAT   4106      14.318   14.720    0.095   1.00 27.76
ATOM   21037   OH2 WAT   4107      46.641  -18.008    5.068   1.00 28.99
ATOM   21038   OH2 WAT   4108      40.504  -35.415   30.077   1.00 30.68
ATOM   21039   OH2 WAT   4109     -21.465    1.072   -0.752   1.00 33.32
ATOM   21040   OH2 WAT   4110      46.498   -3.634   42.684   1.00 31.74
ATOM   21041   OH2 WAT   4111      18.777  -56.294   21.233   1.00 25.38
ATOM   21042   OH2 WAT   4112       4.896  -54.443   22.412   1.00 30.18
ATOM   21043   OH2 WAT   4113      -6.278  -12.430    3.805   1.00 29.79
ATOM   21044   OH2 WAT   4114      31.595  -33.290   16.444   1.00 31.75
ATOM   21045   OH2 WAT   4115      26.923   26.631   13.935   1.00 33.99
ATOM   21046   OH2 WAT   4116     -29.043    5.487   -7.898   1.00 45.43
ATOM   21047   OH2 WAT   4117     -16.588  -19.270   41.769   1.00 31.95
ATOM   21048   OH2 WAT   4118       6.070    9.092   39.715   1.00 30.14
ATOM   21049   OH2 WAT   4119      -3.516  -31.633   64.053   1.00 45.65
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ATOM  21050  OH2 WAT  4120    52.126  -3.822  53.340  1.00 45.42
ATOM  21051  OH2 WAT  4121    46.817  -4.484 -14.025  1.00 46.99
ATOM  21052  OH2 WAT  4122   -12.592   3.190  66.991  1.00 35.76
ATOM  21053  OH2 WAT  4123     3.350  29.034  35.859  1.00 34.34
ATOM  21054  OH2 WAT  4124     0.606 -33.642  55.873  1.00 32.91
ATOM  21055  OH2 WAT  4125   -14.891  36.065  20.896  1.00 37.79
ATOM  21056  OH2 WAT  4126   -25.092   9.956  50.529  1.00 32.04
ATOM  21057  OH2 WAT  4127    24.645   3.578  21.558  1.00 33.84
ATOM  21058  OH2 WAT  4128    14.966 -15.407  27.047  1.00 37.48
ATOM  21059  OH2 WAT  4129    25.311   0.590  59.424  1.00 32.26
ATOM  21060  OH2 WAT  4130     5.921   2.186  48.638  1.00 28.21
ATOM  21061  OH2 WAT  4131    -0.194 -33.527   6.693  1.00 29.78
ATOM  21062  OH2 WAT  4132    -9.038  35.946  43.790  1.00 37.55
ATOM  21063  OH2 WAT  4133    17.435 -31.315  16.469  1.00 31.72
ATOM  21064  OH2 WAT  4134    30.359   5.569  52.711  1.00 23.92
ATOM  21065  OH2 WAT  4135     3.683 -12.556  17.583  1.00 19.93
ATOM  21066  OH2 WAT  4136    19.428 -23.653  47.102  1.00 24.33
ATOM  21067  OH2 WAT  4137     4.278  27.765  15.197  1.00 31.50
ATOM  21068  OH2 WAT  4138     6.578 -15.894  41.477  1.00 20.38
ATOM  21069  OH2 WAT  4139    28.301  -2.532  -0.522  1.00 24.30
ATOM  21070  OH2 WAT  4140    37.632 -34.367  20.394  1.00 26.22
ATOM  21071  OH2 WAT  4141   -17.982  10.709  12.655  1.00 28.44
ATOM  21072  OH2 WAT  4142    14.342 -13.857  17.205  1.00 25.59
ATOM  21073  OH2 WAT  4143     1.448 -15.812  37.733  1.00 25.27
ATOM  21074  OH2 WAT  4144    17.870 -19.299   7.566  1.00 26.09
ATOM  21075  OH2 WAT  4145     9.956 -49.449  29.174  1.00 28.96
ATOM  21076  OH2 WAT  4146    17.480   3.336  10.956  1.00 30.39
ATOM  21077  OH2 WAT  4147     8.517  -4.567   9.940  1.00 31.22
ATOM  21078  OH2 WAT  4148    -7.175   0.887  19.891  1.00 27.12
ATOM  21079  OH2 WAT  4149    28.989  41.203  15.263  1.00 29.63
ATOM  21080  OH2 WAT  4150    23.580   3.660  40.283  1.00 39.46
ATOM  21081  OH2 WAT  4151    13.879  13.838  16.264  1.00 28.18
ATOM  21082  OH2 WAT  4152     3.363 -53.015  26.505  1.00 26.41
ATOM  21083  OH2 WAT  4153    41.742 -31.794  51.912  1.00 29.88
ATOM  21084  OH2 WAT  4154    15.462  21.257  30.971  1.00 33.63
ATOM  21085  OH2 WAT  4155    13.429 -11.032  37.773  1.00 32.69
ATOM  21086  OH2 WAT  4156     4.765  -2.386  40.740  1.00 35.83
ATOM  21087  OH2 WAT  4157    19.023 -19.667  75.203  1.00 37.72
ATOM  21088  OH2 WAT  4158    19.034 -11.102  19.527  1.00 33.73
ATOM  21089  OH2 WAT  4159    -1.263  16.009  20.936  1.00 27.24
ATOM  21090  OH2 WAT  4160    -6.256 -45.054   6.939  1.00 41.51
ATOM  21091  OH2 WAT  4161    15.761 -28.451  54.807  1.00 36.09
ATOM  21092  OH2 WAT  4162    18.439  14.295  19.227  1.00 38.49
ATOM  21093  OH2 WAT  4163    -3.972 -20.387  37.814  1.00 31.16
ATOM  21094  OH2 WAT  4164    18.013  -1.645  54.687  1.00 30.47
ATOM  21095  OH2 WAT  4165   -15.633  33.909  22.604  1.00 31.22
ATOM  21096  OH2 WAT  4166    40.780  -8.375  40.145  1.00 32.51
ATOM  21097  OH2 WAT  4167    47.802  30.040   7.228  1.00 40.79
ATOM  21098  OH2 WAT  4168    -3.032 -32.860  34.864  1.00 27.66
ATOM  21099  OH2 WAT  4169     9.198  20.743  72.320  1.00 35.07
ATOM  21100  OH2 WAT  4170    11.975 -21.527   2.995  1.00 36.62
ATOM  21101  OH2 WAT  4171   -30.445  -6.086  44.089  1.00 34.70
ATOM  21102  OH2 WAT  4172    -5.261 -11.466  53.111  1.00 44.39
ATOM  21103  OH2 WAT  4173   -14.399 -20.387  40.817  1.00 30.20
ATOM  21104  OH2 WAT  4174   -10.618 -14.092   4.622  1.00 31.64
ATOM  21105  OH2 WAT  4175    14.591 -19.755   5.914  1.00 37.61
ATOM  21106  OH2 WAT  4176    19.353 -22.226   0.817  1.00 32.55
ATOM  21107  OH2 WAT  4177   -29.776  -5.355  39.885  1.00 30.32
ATOM  21108  OH2 WAT  4178    10.534 -13.068 -20.889  1.00 35.70
ATOM  21109  OH2 WAT  4179    -8.062   5.216  33.169  1.00 25.98
ATOM  21110  OH2 WAT  4180    -2.522  30.394  63.742  1.00 28.47
ATOM  21111  OH2 WAT  4181    46.009   3.328  33.070  1.00 35.13
ATOM  21112  OH2 WAT  4182     8.360   8.234  41.757  1.00 29.18
ATOM  21113  OH2 WAT  4183    42.814 -18.598  55.686  1.00 37.99
ATOM  21114  OH2 WAT  4184   -16.001  22.656  38.987  1.00 29.36
ATOM  21115  OH2 WAT  4185    10.259 -36.135  10.535  1.00 37.88
ATOM  21116  OH2 WAT  4186   -15.684  -9.143  -8.092  1.00 31.91
ATOM  21117  OH2 WAT  4187    -1.090   1.204  14.459  1.00 30.11
ATOM  21118  OH2 WAT  4188    44.289   2.682  29.166  1.00 28.69
ATOM  21119  OH2 WAT  4189    -0.552 -28.362  46.000  1.00 28.10
ATOM  21120  OH2 WAT  4190    13.135  -5.781  41.932  1.00 35.53
ATOM  21121  OH2 WAT  4191    19.734  30.686  49.844  1.00 35.70
ATOM  21122  OH2 WAT  4192   -36.378 -21.364  23.565  1.00 35.60
ATOM  21123  OH2 WAT  4193    17.251   0.350  12.314  1.00 23.98
ATOM  21124  OH2 WAT  4194   -10.271 -38.090  23.438  1.00 32.22
ATOM  21125  OH2 WAT  4195   -22.687   7.954   3.699  1.00 33.28
ATOM  21126  OH2 WAT  4196   -21.951  15.459   4.933  1.00 31.65
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ATOM    21127  OH2 WAT   4197     -17.403    21.503    -8.388   1.00 32.40
ATOM    21128  OH2 WAT   4198      21.977     9.231    37.108   1.00 32.87
ATOM    21129  OH2 WAT   4199      37.419    17.868    21.884   1.00 46.31
ATOM    21130  OH2 WAT   4200      22.196     9.629    18.773   1.00 31.77
ATOM    21131  OH2 WAT   4201      16.692   -23.322    -5.245   1.00 36.91
ATOM    21132  OH2 WAT   4202      42.777   -33.719    53.939   1.00 35.86
ATOM    21133  OH2 WAT   4203       1.354    -2.239    14.757   1.00 37.10
ATOM    21134  OH2 WAT   4204     -26.952    -3.544    38.440   1.00 33.73
ATOM    21135  OH2 WAT   4205      29.239    -5.609    38.042   1.00 29.97
ATOM    21136  OH2 WAT   4206      43.138     0.368    25.089   1.00 32.24
ATOM    21137  OH2 WAT   4207      52.415    -7.788    51.945   1.00 30.80
ATOM    21138  OH2 WAT   4208      -2.220     0.196    40.301   1.00 41.13
ATOM    21139  OH2 WAT   4209       9.166   -36.364     8.279   1.00 32.28
ATOM    21140  OH2 WAT   4210      37.549   -23.883    19.085   1.00 35.85
ATOM    21141  OH2 WAT   4211      40.366   -43.408    18.178   1.00 35.18
ATOM    21142  OH2 WAT   4212      41.259   -39.426    17.720   1.00 35.03
ATOM    21143  OH2 WAT   4213       5.966   -16.794    26.485   1.00 33.99
ATOM    21144  OH2 WAT   4214      -0.504    24.436    38.709   1.00 31.34
ATOM    21145  OH2 WAT   4215     -31.816    -7.311    63.265   1.00 46.67
ATOM    21146  OH2 WAT   4216      31.602   -27.488    41.591   1.00 32.87
ATOM    21147  OH2 WAT   4217      22.491     8.396    33.548   1.00 37.01
ATOM    21148  OH2 WAT   4218       8.588    14.998    -7.928   1.00 34.59
ATOM    21149  OH2 WAT   4219      -5.071    39.648    64.146   1.00 36.17
ATOM    21150  OH2 WAT   4220      30.649     7.956    54.006   1.00 28.56
ATOM    21151  OH2 WAT   4221     -25.150     4.421    48.986   1.00 31.32
ATOM    21152  OH2 WAT   4222       4.603   -15.946    39.930   1.00 28.11
ATOM    21153  OH2 WAT   4223     -19.155    22.017    52.855   1.00 36.51
ATOM    21154  OH2 WAT   4224      -1.225    27.223    40.496   1.00 34.03
ATOM    21155  OH2 WAT   4225       9.323    -6.838    44.620   1.00 32.56
ATOM    21156  OH2 WAT   4226     -13.348   -40.907    25.217   1.00 36.02
ATOM    21157  OH2 WAT   4227     -29.811   -16.829    55.472   1.00 40.39
ATOM    21158  OH2 WAT   4228       1.208    13.403   -12.804   1.00 25.50
ATOM    21159  OH2 WAT   4229      31.515    42.188    14.797   1.00 36.19
ATOM    21160  OH2 WAT   4230     -22.435   -40.140     8.269   1.00 32.85
ATOM    21161  OH2 WAT   4231       4.884    -8.621    38.037   1.00 29.97
ATOM    21162  OH2 WAT   4232      41.136   -12.337    43.000   1.00 34.40
ATOM    21163  OH2 WAT   4233      22.346    33.851    68.574   1.00 47.30
ATOM    21164  OH2 WAT   4234       6.737     5.652    40.043   1.00 42.41
ATOM    21165  OH2 WAT   4235       5.196   -13.093    37.173   1.00 33.25
ATOM    21166  OH2 WAT   4236       5.818    -1.680    14.657   1.00 40.01
ATOM    21167  OH2 WAT   4237      -5.653   -17.045     3.161   1.00 38.26
ATOM    21168  OH2 WAT   4238     -22.623     5.252    41.872   1.00 32.25
ATOM    21169  OH2 WAT   4239     -13.321   -28.124    62.372   1.00 31.95
ATOM    21170  OH2 WAT   4240     -22.968    -6.416    35.146   1.00 22.64
ATOM    21171  OH2 WAT   4241     -27.579   -29.214    23.224   1.00 28.40
ATOM    21172  OH2 WAT   4242     -17.589    -1.229    71.448   1.00 40.90
ATOM    21173  OH2 WAT   4243      -1.591   -26.804     3.938   1.00 30.62
ATOM    21174  OH2 WAT   4244      11.074   -44.495    29.557   1.00 40.76
ATOM    21175  OH2 WAT   4245      -4.840    12.652    24.363   1.00 35.77
ATOM    21176  OH2 WAT   4246      47.599    -6.430    55.516   1.00 36.89
ATOM    21177  OH2 WAT   4247     -28.043     2.899    -0.586   1.00 42.68
ATOM    21178  OH2 WAT   4248      39.767   -37.649    16.094   1.00 42.67
ATOM    21179  OH2 WAT   4249      22.684    29.859     5.493   1.00 39.59
ATOM    21180  OH2 WAT   4250      -8.757    40.956     1.091   1.00 32.81
ATOM    21181  OH2 WAT   4251      40.067   -45.503    20.265   1.00 35.71
ATOM    21182  OH2 WAT   4252      26.027     1.180    40.411   1.00 31.92
ATOM    21183  OH2 WAT   4253      17.254   -13.580    32.677   1.00 37.95
ATOM    21184  OH2 WAT   4254      38.172    16.681    33.750   1.00 36.90
ATOM    21185  OH2 WAT   4255     -23.882    11.970     4.626   1.00 35.75
ATOM    21186  OH2 WAT   4256      24.484    29.594    17.149   1.00 36.63
ATOM    21187  OH2 WAT   4257      14.330    14.056    -7.663   1.00 32.35
ATOM    21188  OH2 WAT   4258       9.933   -26.844    55.259   1.00 34.01
ATOM    21189  OH2 WAT   4259      12.646    -9.356   -24.468   1.00 43.12
ATOM    21190  OH2 WAT   4260      40.273    -5.490     1.123   1.00 31.20
ATOM    21191  OH2 WAT   4261      17.384    -0.963    15.304   1.00 40.38
ATOM    21192  OH2 WAT   4262       7.357     1.338    55.482   1.00 34.09
ATOM    21193  OH2 WAT   4263      -7.701    28.368    40.512   1.00 31.74
ATOM    21194  OH2 WAT   4264       6.424    28.970    12.284   1.00 35.75
ATOM    21195  OH2 WAT   4265      28.293    -7.969    59.997   1.00 37.02
ATOM    21196  OH2 WAT   4266      33.471   -50.990    21.231   1.00 34.39
ATOM    21197  OH2 WAT   4267      36.422     1.406    67.198   1.00 37.21
ATOM    21198  OH2 WAT   4268       4.155    15.109    20.451   1.00 40.58
ATOM    21199  OH2 WAT   4269     -26.153    -3.024    -4.695   1.00 24.77
ATOM    21200  OH2 WAT   4270      30.499   -25.454    72.705   1.00 38.88
ATOM    21201  OH2 WAT   4271       4.763    51.788     4.914   1.00 27.90
ATOM    21202  OH2 WAT   4272     -11.498    46.346    14.162   1.00 32.61
ATOM    21203  OH2 WAT   4273      39.036   -19.110    16.994   1.00 32.98
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ATOM   21204   OH2 WAT   4274    -6.998   36.928   26.870   1.00 43.35
ATOM   21205   OH2 WAT   4275    46.948    7.501   34.599   1.00 24.81
ATOM   21206   OH2 WAT   4276    50.983   -8.055   -5.708   1.00 40.55
ATOM   21207   OH2 WAT   4277    19.452  -39.708   61.023   1.00 34.30
ATOM   21208   OH2 WAT   4278     7.397  -30.621   39.404   1.00 33.65
ATOM   21209   OH2 WAT   4279    13.876   -1.133   12.109   1.00 41.50
ATOM   21210   OH2 WAT   4280    -0.160   20.020   -0.572   1.00 32.16
ATOM   21211   OH2 WAT   4281    45.793  -19.678   50.360   1.00 35.75
ATOM   21212   OH2 WAT   4282    47.155   27.281   14.452   1.00 38.21
ATOM   21213   OH2 WAT   4283     8.531  -12.525   69.846   1.00 42.83
ATOM   21214   OH2 WAT   4284    38.230   21.846   69.235   1.00 34.37
ATOM   21215   OH2 WAT   4285    49.714  -15.553    2.722   1.00 31.07
ATOM   21216   OH2 WAT   4286     8.106   30.082   54.050   1.00 33.73
ATOM   21217   OH2 WAT   4287    23.244   32.218   50.889   1.00 33.29
ATOM   21218   OH2 WAT   4288    17.581   21.404   35.067   1.00 43.77
ATOM   21219   OH2 WAT   4289    19.334    9.501   37.368   1.00 34.18
ATOM   21220   OH2 WAT   4290   -32.573  -19.162   54.321   1.00 42.08
ATOM   21221   OH2 WAT   4291    36.584  -48.023   13.443   1.00 37.99
ATOM   21222   OH2 WAT   4292    53.608    2.609   45.918   1.00 29.33
ATOM   21223   OH2 WAT   4293   -28.355   -3.724   11.537   1.00 36.13
ATOM   21224   OH2 WAT   4294    29.801   34.256   66.452   1.00 42.75
ATOM   21225   OH2 WAT   4295    37.391   14.555   21.327   1.00 29.90
ATOM   21226   OH2 WAT   4296    -0.961   22.126   13.597   1.00 30.11
ATOM   21227   OH2 WAT   4297    31.707    0.427  -19.155   1.00 40.22
ATOM   21228   OH2 WAT   4298    31.457  -20.855  -17.283   1.00 37.42
ATOM   21229   OH2 WAT   4299    25.101  -17.682  -14.424   1.00 32.68
ATOM   21230   OH2 WAT   4300    20.756    8.915   -7.538   1.00 38.06
ATOM   21231   OH2 WAT   4301     8.289  -46.227   33.339   1.00 36.23
ATOM   21232   OH2 WAT   4302   -30.592   -2.404   23.454   1.00 36.26
ATOM   21233   OH2 WAT   4303    -0.554   12.427  -16.863   1.00 29.01
ATOM   21234   OH2 WAT   4304    30.322  -21.630  -20.939   1.00 33.55
ATOM   21235   OH2 WAT   4305   -15.891   14.303   49.053   1.00 41.02
ATOM   21236   OH2 WAT   4306    -5.861  -24.996   39.922   1.00 37.54
ATOM   21237   OH2 WAT   4307   -18.592    5.594   59.709   1.00 44.08
ATOM   21238   OH2 WAT   4308   -13.782  -29.666    2.092   1.00 36.94
ATOM   21239   OH2 WAT   4309    -0.006   10.614   60.001   1.00 43.52
ATOM   21240   OH2 WAT   4310    32.762   -9.491  -23.904   1.00 33.22
ATOM   21241   OH2 WAT   4311    38.244   -3.752    7.396   1.00 36.21
ATOM   21242   OH2 WAT   4312    46.881  -21.498   -8.257   1.00 46.78
ATOM   21243   OH2 WAT   4313    29.381  -44.133   36.141   1.00 38.69
ATOM   21244   OH2 WAT   4314    44.697   -1.657   57.305   1.00 27.49
ATOM   21245   OH2 WAT   4315     3.764  -16.191   73.425   1.00 46.00
ATOM   21246   OH2 WAT   4316     1.552    2.561   15.840   1.00 39.61
ATOM   21247   OH2 WAT   4317    22.489   10.399   26.199   1.00 41.03
ATOM   21248   OH2 WAT   4318   -28.455   -3.493   20.182   1.00 29.54
ATOM   21249   OH2 WAT   4319    22.485  -54.018   16.709   1.00 30.01
ATOM   21250   OH2 WAT   4320    17.660  -27.711   52.097   1.00 38.58
ATOM   21251   OH2 WAT   4321    56.912   13.287   51.121   1.00 44.62
ATOM   21252   OH2 WAT   4322   -21.611  -37.255    5.058   1.00 25.63
ATOM   21253   OH2 WAT   4323    36.941   -3.556   52.524   1.00 35.09
ATOM   21254   OH2 WAT   4324    13.800    6.771  -21.931   1.00 38.56
ATOM   21255   OH2 WAT   4325   -30.772  -37.278   18.011   1.00 47.52
ATOM   21256   OH2 WAT   4326   -31.800  -32.961   17.765   1.00 43.84
ATOM   21257   OH2 WAT   4327    42.719   27.673   55.936   1.00 44.26
ATOM   21258   OH2 WAT   4328    45.545   11.091   29.384   1.00 35.10
ATOM   21259   OH2 WAT   4329    25.956  -50.998   23.510   1.00 34.18
ATOM   21260   OH2 WAT   4330    37.100  -20.795   16.046   1.00 44.28
ATOM   21261   OH2 WAT   4331    22.014    2.258  -19.556   1.00 33.51
ATOM   21262   OH2 WAT   4332   -22.317   18.441    5.383   1.00 36.71
ATOM   21263   OH2 WAT   4333   -10.019  -27.346   26.266   1.00 26.18
ATOM   21264   OH2 WAT   4334    -9.502  -49.756   12.668   1.00 45.74
ATOM   21265   OH2 WAT   4335   -20.898  -40.436   24.117   1.00 33.74
ATOM   21266   OH2 WAT   4336   -19.836   21.671  -18.554   1.00 46.45
ATOM   21267   OH2 WAT   4337     1.661   -6.925   34.463   1.00 36.93
ATOM   21268   OH2 WAT   4338    42.933   18.805   72.619   1.00 34.61
ATOM   21269   OH2 WAT   4339    -0.593   -4.255   21.944   1.00 32.00
ATOM   21270   OH2 WAT   4340     6.393   20.185    3.149   1.00 33.81
ATOM   21271   OH2 WAT   4341    15.614   24.362    5.634   1.00 46.42
ATOM   21272   OH2 WAT   4342    11.089   39.084   58.882   1.00 38.94
ATOM   21273   OH2 WAT   4343    30.841  -39.067   34.205   1.00 44.48
ATOM   21274   OH2 WAT   4344    35.060  -10.488   67.360   1.00 46.38
ATOM   21275   OH2 WAT   4345     3.613  -41.917    8.912   1.00 42.89
ATOM   21276   OH2 WAT   4346   -10.943   42.604   43.714   1.00 40.74
ATOM   21277   OH2 WAT   4347    16.343   51.120   19.143   1.00 39.64
ATOM   21278   OH2 WAT   4348     3.496   14.826   36.570   1.00 28.52
ATOM   21279   OH2 WAT   4349    46.266   37.133    2.322   1.00 37.96
ATOM   21280   OH2 WAT   4350   -11.265   42.564   22.557   1.00 35.16
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ATOM   21281  OH2 WAT   4351    -17.123   13.946   41.412   1.00  37.12
ATOM   21282  OH2 WAT   4352    -29.129  -17.466    5.755   1.00  37.27
ATOM   21283  OH2 WAT   4353     31.454  -25.540   69.971   1.00  28.84
ATOM   21284  OH2 WAT   4354     29.447   -7.929  -21.989   1.00  31.86
ATOM   21285  OH2 WAT   4355    -16.353   12.502   47.101   1.00  30.21
ATOM   21286  OH2 WAT   4356     12.706  -13.430   21.716   1.00  35.82
ATOM   21287  OH2 WAT   4357      7.648  -13.329  -10.841   1.00  33.89
ATOM   21288  OH2 WAT   4358     44.573   15.736   67.094   1.00  35.84
ATOM   21289  OH2 WAT   4359    -12.313   23.838   12.610   1.00  35.05
ATOM   21290  OH2 WAT   4360      5.658   11.876  -23.706   1.00  41.15
ATOM   21291  OH2·WAT   4361    -14.272  -30.125   22.863   1.00  24.72
ATOM   21292  OH2 WAT   4362     -5.304  -48.318   25.587   1.00  39.16
ATOM   21293  OH2 WAT   4363     30.700  -35.265   45.218   1.00  38.38
ATOM   21294  OH2 WAT   4364    -28.043  -13.694   45.466   1.00  34.76
ATOM   21295  OH2 WAT   4365     36.395  -45.668   27.357   1.00  32.81
ATOM   21296  OH2 WAT   4366     45.633  -16.075    9.631   1.00  27.97
ATOM   21297  OH2 WAT   4367      5.551    1.705   57.364   1.00  37.70
ATOM   21298  OH2 WAT   4368      4.335   33.487   73.208   1.00  34.45
ATOM   21299  OH2 WAT   4369    -16.577   -5.490  -18.466   1.00  39.46
ATOM   21300  OH2 WAT   4370     44.958   -2.975   40.294   1.00  41.84
ATOM   21301  OH2 WAT   4371    -11.628   28.838   13.039   1.00  42.95
ATOM   21302  OH2 WAT   4372     40.841   14.763   27.236   1.00  45.00
ATOM   21303  OH2 WAT   4373     10.333   28.827   73.761   1.00  37.30
ATOM   21304  OH2 WAT   4374      1.040   49.430    3.854   1.00  40.14
ATOM   21305  OH2 WAT   4375     16.228    2.460  -24.363   1.00  29.98
ATOM   21306  OH2 WAT   4376    -10.817  -39.207   26.234   1.00  28.48
ATOM   21307  OH2 WAT   4377    -13.169  -26.151   69.385   1.00  42.50
ATOM   21308  OH2 WAT   4378     17.911  -12.633   35.282   1.00  30.10
ATOM   21309  OH2 WAT   4379      9.833  -18.262   -5.406   1.00  33.81
ATOM   21310  OH2 WAT   4380    -23.233   -9.084   34.300   1.00  30.72
ATOM   21311  OH2 WAT   4381     52.131   29.747   28.709   1.00  41.21
ATOM   21312  OH2 WAT   4382      1.375    6.960   58.261   1.00  35.75
ATOM   21313  OH2 WAT   4383    -31.130   -3.570   19.795   1.00  39.36
ATOM   21314  OH2 WAT   4384     37.817    3.006   69.575   1.00  41.33
ATOM   21315  OH2 WAT   4385     -4.563  -16.096    0.551   1.00  37.46
ATOM   21316  OH2 WAT   4386      4.037   -3.919   18.274   1.00  32.56
ATOM   21317  OH2 WAT   4387    -21.141   -1.984   26.707   1.00  33.58
ATOM   21318  OH2 WAT   4388    -22.717    1.730  -11.319   1.00  44.33
ATOM   21319  OH2 WAT   4389     38.993  -41.394   21.353   1.00  26.94
ATOM   21320  OH2 WAT   4390     35.457   -6.585   23.306   1.00  41.41
ATOM   21321  OH2 WAT   4391    -28.515  -11.015   44.907   1.00  44.09
ATOM   21322  OH2 WAT   4392     21.162   12.941   61.076   1.00  33.81
ATOM   21323  OH2 WAT   4393    -15.197    2.825   26.060   1.00  39.04
ATOM   21324  OH2 WAT   4394    -15.450  -25.101   26.034   1.00  25.87
ATOM   21325  OH2 WAT   4395      2.390   19.780   -0.161   1.00  34.54
ATOM   21326  OH2 WAT   4396     43.487  -25.747   59.438   1.00  35.57
ATOM   21327  OH2 WAT   4397     48.629   36.856   21.672   1.00  44.39
ATOM   21328  OH2 WAT   4398     17.100   12.356   40.201   1.00  40.21
ATOM   21329  OH2 WAT   4399      4.507  -10.245  -15.502   1.00  39.12
ATOM   21330  OH2 WAT   4400    -27.080    5.572    0.821   1.00  39.35
ATOM   21331  OH2 WAT   4401     -3.672    0.984   37.698   1.00  39.93
ATOM   21332  OH2 WAT   4402    -20.583   18.697   49.997   1.00  34.01
ATOM·  21333  OH2 WAT   4403     39.072  -14.613   58.597   1.00  31.42
ATOM·  21334  OH2 WAT   4404     29.709   12.185    3.398   1.00  44.25
ATOM   21335  OH2 WAT   4405     35.880  -22.841   12.910   1.00  33.52
ATOM   21336  OH2 WAT   4406    -35.845  -12.885   22.300   1.00  34.99
ATOM   21337  OH2 WAT   4407     15.319   26.997    5.574   1.00  32.51
ATOM   21338  OH2 WAT   4408      8.333   17.040    3.228   1.00  40.92
ATOM   21339  OH2 WAT   4409    -10.936   26.210   13.895   1.00  37.53
ATOM   21340  OH2 WAT   4410     55.583    6.631   16.381   1.00  45.01
ATOM   21341  OH2 WAT   4411     27.248   -0.852   16.193   1.00  32.03
ATOM   21342  OH2 WAT   4412     11.166  -30.270   54.430   1.00  35.34
ATOM   21343  OH2 WAT   4413     27.193   30.827   45.265   1.00  48.03
ATOM   21344  OH2 WAT   4414      1.816   -4.001   33.376   1.00  38.02
ATOM   21345  OH2 WAT   4415     -7.358    6.238   21.426   1.00  31.68
ATOM   21346  OH2 WAT   4416     23.525   29.907    2.579   1.00  40.00
ATOM   21347  OH2 WAT   4417     19.207    7.060  -17.753   1.00  45.08
ATOM   21348  OH2 WAT   4418     27.504   25.535   33.468   1.00  36.75
ATOM   21349  OH2 WAT   4419      6.892  -32.295   41.776   1.00  41.26
ATOM   21350  OH2 WAT   4420     17.067   -1.474   58.088   1.00  34.61
ATOM   21351  OH2 WAT   4421     22.907   29.267   14.656   1.00  39.78
ATOM   21352  OH2 WAT   4422      6.224  -49.951   10.824   1.00  28.84
ATOM   21353  OH2 WAT   4423    -16.207   35.901   25.434   1.00  40.39
ATOM   21354  OH2 WAT   4424      0.738   15.078   67.744   1.00  35.60
ATOM   21355  OH2 WAT   4425    -22.384    0.170   34.473   1.00  38.76
ATOM   21356  OH2 WAT   4426     52.264   32.015   13.016   1.00  52.37
ATOM   21357  OH2 WAT   4427     28.668  -23.464  -19.783   1.00  40.92
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ATOM   21358   OH2 WAT   4428       29.624   26.370   37.226   1.00 43.83
ATOM   21359   OH2 WAT   4429       17.324  -33.128   69.819   1.00 36.99
ATOM   21360   OH2 WAT   4430       10.556    3.415   13.566   1.00 46.02
ATOM   21361   OH2 WAT   4431        8.523   41.333   58.843   1.00 39.73
ATOM   21362   OH2 WAT   4432       33.167   23.763   37.373   1.00 28.85
ATOM   21363   OH2 WAT   4433       15.195  -18.491  -17.090   1.00 47.32
ATOM   21364   OH2 WAT   4434      -23.836    2.684   36.535   1.00 38.09
ATOM   21365   OH2 WAT   4435       19.214   12.147   -5.475   1.00 35.97
ATOM   21366   OH2 WAT   4436       27.162   -7.740   67.562   1.00 31.45
ATOM   21367   OH2 WAT   4437      -20.971   -1.223   12.183   1.00 47.05
ATOM   21368   OH2 WAT   4438       19.674   12.470   63.556   1.00 44.37
ATOM   21369   OH2 WAT   4439       -1.525   40.553   27.756   1.00 41.21
ATOM   21370   OH2 WAT   4440      -18.654    1.585   28.426   1.00 32.42
ATOM   21371   OH2 WAT   4441       17.125    0.453   50.867   1.00 40.97
ATOM   21372   OH2 WAT   4442       46.616  -22.499   -3.435   1.00 40.16
ATOM   21373   OH2 WAT   4443       14.381   25.984   34.791   1.00 37.01
ATOM   21374   OH2 WAT   4444       -1.785  -17.781    2.660   1.00 35.38
ATOM   21375   OH2 WAT   4445      -34.581  -22.257   26.233   1.00 42.91
ATOM   21376   OH2 WAT   4446       24.684   23.141    0.831   1.00 35.73
ATOM   21377   OH2 WAT   4447       15.504    6.715   63.224   1.00 38.96
ATOM   21378   OH2 WAT   4448       19.904   21.033   71.538   1.00 43.76
ATOM   21379   OH2 WAT   4449      -11.227   22.621   -8.864   1.00 27.21
ATOM   21380   OH2 WAT   4450       22.345    0.986   14.851   1.00 34.11
ATOM   21381   OH2 WAT   4451      -10.539  -25.144   27.450   1.00 36.84
ATOM   21382   OH2 WAT   4452       16.140   25.932   32.224   1.00 35.40
ATOM   21383   OH2 WAT   4453       44.961   30.241   15.396   1.00 37.99
ATOM   21384   OH2 WAT   4454       34.177  -25.015   12.520   1.00 36.11
ATOM   21385   OH2 WAT   4455      -20.127  -20.201   41.569   1.00 32.33
ATOM   21386   OH2 WAT   4456        5.429  -56.224   24.411   1.00 42.80
ATOM   21387   OH2 WAT   4457       32.065    2.167   30.883   1.00 43.06
ATOM   21388   OH2 WAT   4458        5.091   42.861    7.752   1.00 39.50
ATOM   21389   OH2 WAT   4459      -21.209  -11.056    5.163   1.00 41.80
ATOM   21390   OH2 WAT   4460       19.803    9.836   20.265   1.00 40.87
ATOM   21391   OH2 WAT   4461       29.343    4.465   26.139   1.00 29.91
ATOM   21392   OH2 WAT   4462       10.788   42.451    0.401   1.00 42.38
ATOM   21393   OH2 WAT   4463       -7.021  -50.881   26.507   1.00 32.87
ATOM   21394   OH2 WAT   4464      -19.249   19.648   45.938   1.00 29.54
ATOM   21395   OH2 WAT   4465       48.159    7.324    9.609   1.00 39.08
ATOM   21396   OH2 WAT   4466        0.381  -40.577    8.688   1.00 37.54
ATOM   21397   OH2 WAT   4467      -25.910  -21.171   45.136   1.00 40.07
ATOM   21398   OH2 WAT   4468      -22.226   -2.802   33.260   1.00 35.07
ATOM   21399   OH2 WAT   4469       -4.952   49.029   23.144   1.00 45.50
ATOM   21400   OH2 WAT   4470       17.417   13.858   -4.051   1.00 38.03
ATOM   21401   OH2 WAT   4471        4.986   16.348  -15.614   1.00 30.12
ATOM   21402   OH2 WAT   4472       15.429  -22.524    1.908   1.00 36.21
ATOM   21403   OH2 WAT   4473       30.126  -47.999   29.175   1.00 23.74
ATOM   21404   OH2 WAT   4474      -19.245    3.242   52.458   1.00 33.15
ATOM   21405   OH2 WAT   4475       41.831   21.851   70.956   1.00 36.15
ATOM   21406   OH2 WAT   4476       25.141  -23.572  -20.451   1.00 35.05
ATOM   21407   OH2 WAT   4477      -23.878    4.412  -11.442   1.00 28.26
ATOM   21408   OH2 WAT   4478       42.991  -24.831   47.594   1.00 35.61
ATOM   21409   OH2 WAT   4479       -7.137   30.657   69.022   1.00 47.25
ATOM   21410   OH2 WAT   4480       17.754    1.462   57.307   1.00 35.59
ATOM   21411   OH2 WAT   4481       -7.414   21.345   -1.587   1.00 30.73
ATOM   21412   OH2 WAT   4482       49.815   21.351   58.077   1.00 37.51
ATOM   21413   OH2 WAT   4483      -15.491   44.459    7.923   1.00 50.41
ATOM   21414   OH2 WAT   4484        4.048  -22.551    5.047   1.00 36.58
ATOM   21415   OH2 WAT   4485       50.672  -12.564   -0.579   1.00 37.00
ATOM   21416   OH2 WAT   4486        2.078  -13.615   27.066   1.00 19.93
ATOM   21417   OH2 WAT   4487       -8.044   32.117   70.958   1.00 27.03
ATOM   21418   OH2 WAT   4488        0.643  -25.729   20.083   1.00 22.99
ATOM   21419   OH2 WAT   4489       17.072   17.442   39.782   1.00 27.80
ATOM   21420   OH2 WAT   4490       39.386  -43.716   22.448   1.00 25.25
ATOM   21421   OH2 WAT   4491       50.725   -6.820   55.355   1.00 43.84
ATOM   21422   OH2 WAT   4492      -19.456   26.078   48.234   1.00 34.33
ATOM   21423   OH2 WAT   4493       29.077  -49.519    9.320   1.00 36.75
ATOM   21424   OH2 WAT   4494        9.459  -18.005    2.269   1.00 34.78
ATOM   21425   OH2 WAT   4495      -19.163   36.702   49.212   1.00 32.59
ATOM   21426   OH2 WAT   4496       16.195    7.713  -20.690   1.00 46.10
ATOM   21427   OH2 WAT   4497       26.413   -5.902   59.650   1.00 37.00
ATOM   21428   OH2 WAT   4498      -22.773   19.390    2.650   1.00 33.05
ATOM   21429   OH2 WAT   4499        1.717  -30.055   70.167   1.00 44.59
ATOM   21430   OH2 WAT   4500      -16.732   24.403   -6.733   1.00 39.96
ATOM   21431   OH2 WAT   4501       46.171  -20.860    3.372   1.00 42.41
ATOM   21432   OH2 WAT   4502        3.145   16.448   33.272   1.00 30.34
ATOM   21433   OH2 WAT   4503        3.333  -30.786   61.572   1.00 33.43
ATOM   21434   OH2 WAT   4504       52.805   18.720   57.784   1.00 39.33
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ATOM   21435   OH2 WAT   4505      31.760 -29.715  16.803  1.00 42.71
ATOM   21436   OH2 WAT   4506      27.158  -0.019  -2.171  1.00 47.55
ATOM   21437   OH2 WAT   4507      16.391  -6.880  13.945  1.00 27.93
ATOM   21438   OH2 WAT   4508     -11.329   8.325  33.144  1.00 35.74
ATOM   21439   OH2 WAT   4509     -34.565 -18.654  31.647  1.00 41.23
ATOM   21440   OH2 WAT   4510       8.119   2.472  45.194  1.00 35.82
ATOM   21441   OH2 WAT   4511      26.135 -26.276   1.441  1.00 43.41
ATOM   21442   OH2 WAT   4512       6.185  13.143  27.534  1.00 38.63
ATOM   21443   OH2 WAT   4513      15.834 -35.849  46.381  1.00 39.03
ATOM   21444   OH2 WAT   4514      52.437  25.745   6.497  1.00 41.04
ATOM   21445   OH2 WAT   4515       5.343   4.118  14.468  1.00 33.27
ATOM   21446   OH2 WAT   4516      53.362   6.451  39.554  1.00 38.27
ATOM   21447   OH2 WAT   4517       1.590  -4.443 -22.357  1.00 33.22
ATOM   21448   OH2 WAT   4518      49.556  -1.588  49.431  1.00 34.00
ATOM   21449   OH2 WAT   4519     -28.945   3.556  61.373  1.00 43.53
ATOM   21450   OH2 WAT   4520     -12.490  17.160  20.670  1.00 39.70
ATOM   21451   OH2 WAT   4521      40.918  -3.831  38.596  1.00 26.45
ATOM   21452   OH2 WAT   4522      10.399  -3.808  63.636  1.00 27.56
ATOM   21453   OH2 WAT   4523      -5.893 -42.115   6.281  1.00 43.08
ATOM   21454   OH2 WAT   4524     -30.106  -0.391  45.625  1.00 36.74
ATOM   21455   OH2 WAT   4525      41.777   0.678 -15.445  1.00 37.86
ATOM   21456   OH2 WAT   4526      14.086  15.973  37.228  1.00 29.86
ATOM   21457   OH2 WAT   4527     -22.519  27.041  47.602  1.00 45.34
ATOM   21458   OH2 WAT   4528     -11.576   3.521 -21.126  1.00 26.78
ATOM   21459   OH2 WAT   4529      -2.842  24.071  13.955  1.00 37.20
ATOM   21460   OH2 WAT   4530      36.314 -37.379   7.290  1.00 36.68
ATOM   21461   OH2 WAT   4531       8.937  41.604  63.559  1.00 44.67
ATOM   21462   OH2 WAT   4532       6.131 -15.555  37.510  1.00 35.99
ATOM   21463   OH2 WAT   4533       2.582 -30.744  64.478  1.00 33.23
ATOM   21464   OH2 WAT   4534      14.122  25.572   3.018  1.00 45.34
ATOM   21465   OH2 WAT   4535      29.990   5.778 -14.327  1.00 46.38
ATOM   21466   OH2 WAT   4536      17.429  -9.357  65.683  1.00 44.69
ATOM   21467   OH2 WAT   4537       6.231 -17.310  74.869  1.00 34.09
ATOM   21468   OH2 WAT   4538      11.057  11.153  65.196  1.00 43.68
ATOM   21469   OH2 WAT   4539     -13.688  21.726  22.028  1.00 48.02
ATOM   21470   OH2 WAT   4540     -31.249  -5.613  11.556  1.00 34.90
ATOM   21471   OH2 WAT   4541      -7.066  28.532  37.518  1.00 37.48
ATOM   21472   OH2 WAT   4542      23.003  24.425  17.044  1.00 35.33
ATOM   21473   OH2 WAT   4543      -3.469  27.584  73.860  1.00 39.05
ATOM   21474   OH2 WAT   4544      35.891  29.059  44.547  1.00 41.31
ATOM   21475   OH2 WAT   4545      18.800  -1.059  10.975  1.00 15.84
ATOM   21476   OH2 WAT   4546     -19.212  -0.670  24.770  1.00 29.47
ATOM   21477   OH2 WAT   4547     -16.028  -8.734 -10.667  1.00 40.15
ATOM   21478   OH2 WAT   4548       5.835 -15.346  20.455  1.00 23.89
ATOM   21479   OH2 WAT   4549      42.287  -4.979  41.504  1.00 27.98
ATOM   21480   OH2 WAT   4550      38.305   9.987  71.347  1.00 48.01
ATOM   21481   OH2 WAT   4551     -11.381  38.933  24.989  1.00 49.32
ATOM   21482   OH2 WAT   4552     -22.300   2.992  33.226  1.00 45.30
ATOM   21483   OH2 WAT   4553       6.931  -6.229  41.554  1.00 41.06
ATOM   21484   OH2 WAT   4554      19.682  -8.377  66.797  1.00 45.95
ATOM   21485   OH2 WAT   4555      36.306 -36.168  62.243  1.00 35.31
ATOM   21486   OH2 WAT   4556      54.304   7.728  12.240  1.00 34.26
ATOM   21487   OH2 WAT   4557     -28.537   7.332  49.621  1.00 40.13
ATOM   21488   OH2 WAT   4558      17.625   9.030  18.391  1.00 42.71
ATOM   21489   OH2 WAT   4559     -12.739  20.162   7.607  1.00 32.46
ATOM   21490   OH2 WAT   4560     -12.182  40.553  51.371  1.00 40.44
ATOM   21491   OH2 WAT   4561      17.431 -17.321  20.994  1.00 19.57
ATOM   21492   OH2 WAT   4562       9.509  14.689  21.947  1.00 18.00
ATOM   21493   OH2 WAT   4563      19.197  17.919  37.745  1.00 39.62
ATOM   21494   OH2 WAT   4564       8.296  41.620  10.968  1.00 40.32
ATOM   21495   OH2 WAT   4565       6.824  16.093 -17.793  1.00 45.81
ATOM   21496   OH2 WAT   4566     -31.651 -18.816   6.729  1.00 45.64
ATOM   21497   OH2 WAT   4567     -12.020  40.602  54.082  1.00 42.65
ATOM   21498   OH2 WAT   4568     -15.024   5.447 -20.431  1.00 37.03
ATOM   21499   OH2 WAT   4569      38.171 -25.627  -5.931  1.00 36.41
ATOM   21500   OH2 WAT   4570      11.961  16.248  26.219  1.00 31.42
ATOM   21501   OH2 WAT   4571      19.997  11.507   0.789  1.00 46.97
ATOM   21502   OH2 WAT   4572     -19.414 -31.785  29.916  1.00 33.12
ATOM   21503   OH2 WAT   4573      30.687  11.177  59.321  1.00 35.02
ATOM   21504   OH2 WAT   4574     -28.171   8.202  -0.223  1.00 45.38
ATOM   21505   OH2 WAT   4575     -23.907  -0.946   0.147  1.00 47.86
ATOM   21506   OH2 WAT   4576      36.420  -9.570 -20.098  1.00 46.95
ATOM   21507   OH2 WAT   4577      -9.302  25.934 -13.864  1.00 17.87
ATOM   21508   OH2 WAT   4578      27.518 -31.859  17.185  1.00 41.07
ATOM   21509   OH2 WAT   4579       9.163  15.018  25.314  1.00 36.50
ATOM   21510   OH2 WAT   4580      20.941  19.630  26.829  1.00 35.95
ATOM   21511   OH2 WAT   4581      29.489  -1.396  -4.410  1.00 31.96
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ATOM   21512  OH2 WAT  4582      33.238  34.672  55.740  1.00 46.22
ATOM   21513  OH2 WAT  4583     -30.816  -5.894  17.338  1.00 49.72
ATOM   21514  OH2 WAT  4584      19.340 -28.094  76.769  1.00 34.85
ATOM   21515  OH2 WAT  4585      -2.179  15.453  30.418  1.00 40.59
ATOM   21516  OH2 WAT  4586       4.279 -17.186  76.947  1.00 48.31
ATOM   21517  OH2 WAT  4587      -0.036 -14.038  25.792  1.00 21.21
ATOM   21518  OH2 WAT  4588      29.067  -1.678   2.086  1.00 24.42
ATOM   21519  OH2 WAT  4589      -5.344  11.926  31.843  1.00 29.45
ATOM   21520  OH2 WAT  4590      -3.000  -4.011 -20.507  1.00 33.38
ATOM   21521  OH2 WAT  4591      16.416 -34.157  13.726  1.00 32.70
ATOM   21522  OH2 WAT  4592      42.496  30.507  62.292  1.00 31.93
ATOM   21523  OH2 WAT  4593      45.544  -3.876   0.068  1.00 37.84
ATOM   21524  OH2 WAT  4594       4.284  25.647  44.152  1.00 46.08
ATOM   21525  OH2 WAT  4595      28.936   0.551 -17.645  1.00 49.26
ATOM   21526  OH2 WAT  4596      28.309  -1.764  -7.219  1.00 34.20
ATOM   21527  OH2 WAT  4597      -0.139  -4.683  -4.704  1.00 40.66
ATOM   21528  OH2 WAT  4598      38.002 -39.295  28.778  1.00 37.91
ATOM   21529  OH2 WAT  4599       1.896 -10.498  26.814  1.00 40.28
ATOM   21530  OH2 WAT  4600      10.875 -31.201  46.215  1.00 46.59
ATOM   21531  OH2 WAT  4601     -17.789  11.593  42.545  1.00 40.33
ATOM   21532  OH2 WAT  4602      13.281 -34.722  45.502  1.00 43.03
ATOM   21533  OH2 WAT  4603      15.546   2.812  48.750  1.00 34.98
ATOM   21534  OH2 WAT  4604     -24.408  -0.962  68.815  1.00 34.14
ATOM   21535  OH2 WAT  4605      27.530   8.533  -3.110  1.00 46.99
ATOM   21536  OH2 WAT  4606      -5.207  -2.672  -4.358  1.00 37.50
ATOM   21537  OH2 WAT  4607      -6.846  -4.949  54.526  1.00 33.19
ATOM   21538  OH2 WAT  4608      -8.773 -28.684  66.448  1.00 41.34
ATOM   21539  OH2 WAT  4609      15.694 -33.293  11.109  1.00 42.89
ATOM   21540  OH2 WAT  4610      25.189   7.699  -4.734  1.00 38.08
ATOM   21541  OH2 WAT  4611     -25.724 -20.312  42.518  1.00 44.59
ATOM   21542  OH2 WAT  4612      30.872 -53.539  20.326  1.00 48.78
ATOM   21543  OH2 WAT  4613       7.005 -17.629   0.602  1.00 47.16
ATOM   21544  OH2 WAT  4614     -20.076  21.041   2.976  1.00 50.56
ATOM   21545  OH2 WAT  4615      49.790  17.372  -5.207  1.00 53.06
ATOM   21546  OH2 WAT  4616      45.033   0.193  -5.524  1.00 36.67
ATOM   21547  OH2 WAT  4617       3.384  12.364  26.877  1.00 47.24
ATOM   21548  OH2 WAT  4618     -23.460 -11.122  39.780  1.00 36.40
ATOM   21549  OH2 WAT  4619      36.510 -18.235 -14.040  1.00 44.41
ATOM   21550  OH2 WAT  4620      27.674  11.270  60.667  1.00 36.19
ATOM   21551  OH2 WAT  4621     -25.671 -31.027   5.734  1.00 35.54
ATOM   21552  OH2 WAT  4622     -33.918 -10.844  11.974  1.00 43.33
END
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Table 2 Crystallographic data quality, phasing, refinement and model quality

Space group & Cell parameters (Å)	$P2_1$ $a = 87.8$ $b = 155.4$ $c = 209.9$ $\beta = 99.3°$			$P2_1$ $a = 86.1$ $b = 157.2$ $c = 100.2$ $\beta = 97.4°$
Data quality				
Data set	Edge	Peak	Remote	Native
Wavelength (Å)	0.97939	0.97927	0.9393	0.979
Limiting resolution (Å)	3.1	2.8	2.8	1.8
R_{meas}[a]	0.161	0.120	0.131	0.103
$<I/\sigma I>$ (high resolution)	12.8 (2.6)	25.6 (6.0)	13.3 (3.3)	15.9 (2.1)
Completeness	0.994	0.999	1.0	0.94
No. unique reflexions (multiplicity)	100 734 (3.5)	136 609 (10.6)	136 664 (3.3)	229 086 (4.5)
Experimental f'/f'' (electrons)[b]	-9.9 / 2.9	-8.6 / 5.4	-1.3 / 3.2	

Refinement (40 – 1.7 Å)

R_{cryst}[c]	0.229 (highest resolution:	0.286)
R_{free}[d]	0.263 (	0.318)
No. reflexions: working / test[d]	206 168 / 22 908	
No. atoms (residues)	19 820 (2 640)	
No. waters	1 610	

Model quality

Ramachandran plot: % residues favourable		90.4
% unfavourable		None
R.m.s. deviations:	Bond lengths	0.006
	Bond angles	1.2
	Dihedral angles	22.1

[a] $R_{meas} = [\sum_h w \sum_i |<I_h> - I_{h,i}|] / \sum_h \sum_i I_{h,i}$, where $w = \sqrt{[n_h/(n_h-1)]}$ and $<I_h> = [\sum_i^n I_{h,i}]/n_h$. This is the multiplicity-weighted R_{symm} [Diederichs, 1997 #155]

[b] Estimates from CHOOCH (Evans, 1999)

[c] $R_{cryst} = \sum_i ||F_o| - |F_c|| / \sum_i |F_o|$; F_o and F_c are observed and calculated structure factor amplitudes.

[d] R_{free}: cross-validation R_{cryst}, i.e. calculated using randomly selected test data not used in refinement.